

REVIEWED

By NVeletz at 1:18 pm, Oct 25, 2024

**ENSOLUM****1. Continue O&M & sampling as stated in report. 2. Submit next quarterly report by January 15, 2025.**

October 23, 2024

New Mexico Oil Conservation Division

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

**Re: Third Quarter 2024 – Remediation System Operation and Monitoring Report
Standard #1
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: NCS1735235018
Abatement Plan Number: AP-126**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Third Quarter 2024 - Remediation System Operation and Monitoring Report* summarizing remediation system performance during the third quarter of 2024 at the Standard #1 (Site, Figure 1). The duration of operation and monitoring activities included in this report is for the period from June 27, 2024, through September 23, 2024.

This report was prepared following the approval from the New Mexico Oil Conservation Division (NMOCD) regarding the dual-phase extraction (DPE) remediation system described in the *Stage 2 Abatement Plan* submitted by LT Environmental, Inc. in September 2019. Although no formal conditions of approval (COAs) have been provided in response to the aforementioned report, this report includes the following information based on COAs issued for similar Sites:

- A summary of remediation activities during the quarter;
- The system run time summary (90 percent (%) run time typically required);
- Total system flow and vacuum measurements;
- Individual well flow rates, photoionization detector (PID) measurements of volatile organic compounds (VOCs), vacuum measurements, and oxygen/carbon dioxide measurements via hand-held analyzers; and
- The petroleum mass removal and fluid product recovery from the remediation system.

Per correspondence with the NMOCD in April 2024, the quarterly remediation summary reports also include data and summaries from groundwater sampling events conducted at the Site during each reporting period. This report summarizes groundwater data gathered during the third quarter of 2024.

REMEDIATION SYSTEM DESCRIPTION

The remediation system at the Site includes a DPE system which uses a high vacuum rotary claw blower to apply vacuum to remediation wells (MW01, MW02, MW03, MW06, MW10, and MW15) connected to the blower via subsurface piping (Figure 2). The extracted air, petroleum vapors, and fluids enter a vapor/liquid separator or “knock out” tank. Air and petroleum vapors are passed

through the high vacuum extraction blower and discharged to the atmosphere via an exhaust stack. Separated liquid, which includes light non-aqueous phase liquids (LNAPL) and potentially impacted groundwater, is pumped to an aboveground storage tank for storage and off-site disposal. The system layout is depicted on Figure 3.

THIRD QUARTER 2024 OPERATION AND MAINTENANCE

Since startup on January 2, 2024, all Site DPE wells were operated in order to recover LNAPL, draw down the groundwater table, and induce air flow in impacted soil zones. Field visits were conducted bi-weekly throughout the third quarter of 2024. Field forms completed during operations and maintenance (O&M) visits are presented as Appendix A.

Between June 27, 2024, and September 23, 2024, the DPE system operated for 2,111 hours for a runtime efficiency of 100%. Appendix B presents photographs of the runtime meter for calculating the third quarter 2024 runtime efficiency. Table 1 presents the DPE system operational hours and calculated percent runtime.

Vapor Recovery

Influent vapor samples from the DPE system are collected every other month during the second through fourth quarters of system operation. Influent vapor sample was collected on July 30 and September 5, 2024. The samples were each collected into two 1-Liter Tedlar® bags and submitted to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico for analysis of VOCs following United States Environmental Protection Agency (EPA) EPA Method 8260B, total petroleum hydrocarbons (TPH) following EPA Method 8015D, and fixed gas analysis of oxygen and carbon dioxide following Gas Processors Association (GPA) Method 2261. A summary of field measurements and analytical results are presented in Tables 2 and 3, respectively. The full laboratory analytical reports are attached as Appendix C. Graphs 1 and 2 also present oxygen and carbon dioxide levels over time, respectively.

Vapor sample data and measured influent flow rates are used to estimate total mass recovered and total emissions generated by the DPE system (Table 4). Based on these estimates, 10,693 pounds (5.3 tons) of TPH in the vapor phase have been removed by the system to date.

Liquid Recovery

Total liquid recovery volumes are measured using a totalizing flow metering device. Since startup of the system on January 2, 2024, through September 23, 2024, approximately 112,689 gallons of liquid have been recovered. The impacted groundwater and recovered LNAPL are emulsified and homogenously commingled enough during extraction that product thickness is unmeasurable in the liquid recovery tank. Therefore, the estimated volume of LNAPL recovered is not measurable and not reported. Liquid recovery is summarized in Table 5.

GROUNDWATER MONITORING

Since October 2018, groundwater gauging and sampling activities have been conducted at the Site. Groundwater gauging and sampling at the Site was completed between September 23 and September 25, 2024, as part of the third quarter 2024 system activities.

Fluid Level Measurements

Prior to purging and sampling, static depth to groundwater and total depth of each monitoring well was measured using an oil/water interface probe. Depth to phase-separated hydrocarbons (PSH, synonymous with LNAPL) was also recorded when present and a correction factor of 0.8 was

applied to the calculated groundwater elevation to account for the depression of the water column caused by the presence of overlying PSH. The interface probe was decontaminated with Alconox® soap and rinsed with distilled water prior to each measurement to prevent cross contamination. Depth to groundwater, depth to PSH, and calculated groundwater elevations are summarized in Table 6. Potentiometric surface maps were drafted with groundwater elevations and PSH thickness measured during the third quarter 2024 quarterly monitoring event (Figure 4).

During the third quarter 2024 gauging event, a trace (less than 0.01 feet) of PSH was observed in monitoring wells MW01, MW02, MW03, MW04, MW05, MW06, and MW14.

In general, the presence of groundwater at the Site is highly variable and no apparent continuous groundwater aquifer has been observed during drilling and/or groundwater monitoring activities. Groundwater flow direction and gradient is generally difficult to interpret, as dry wells often exist around the perimeter of the Site, as well as between wells containing groundwater. Based on historical measurements, groundwater flow direction is variable across the Site, but is generally to the west-northwest and west-southwest.

Groundwater Sampling Activities and Analytical Results

Groundwater samples were collected for laboratory analysis from monitoring wells containing sufficient water to sample and those that did not contain measurable PSH. Disposable polyvinyl chloride (PVC) bailers were used to collect groundwater samples due to limited water volume within several of the monitoring wells. Prior to collecting groundwater samples, Hilcorp purged a minimum of three casing volumes or until the well was bailed dry to ensure water from the adjacent formation, representative of actual aquifer conditions, was sampled. If a well was purged dry, the well was allowed to recharge before samples were collected. Water quality parameters including pH, electrical conductivity, and temperature were measured in each well using a multi-probe water quality field meter during purging.

Groundwater samples were collected into laboratory provided sample bottles and immediately placed on ice for preservation. Samples were submitted to Hall Environmental Analysis Laboratory (Hall) and/or Eurofins (formerly Hall) for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX). Of the wells sampled, one or more BTEX constituent exceeded the New Mexico Water Quality Conservation Commission (NMWQCC) standards at monitoring wells MW12, MW15, MW16, MW18, and MW19. All five aforementioned wells also contained BTEX concentrations exceeding the NMWQCC standards during the second quarter 2024 monitoring event. Monitoring wells MW03 and MW04, which contained BTEX concentrations that exceeded the NMWQCC standards during the second quarter 2024 monitoring event, could not be sampled during the third quarter 2024 monitoring event due to the presence of trace PSH. A summary of groundwater analytical results is presented in Table 7 and on Figure 5, with complete laboratory analytical reports attached as Appendix D.

DISCUSSIONS AND RECOMMENDATIONS

Several individual DPE well flow rates could not be collected during the third quarter 2024 due to scaling within the manifold and associated pitot tubes not allowing for accurate data collection using a magnehelic gauge. Attempts will be made to remove the scaling from the manifold and pitot tubes during the fourth quarter of 2024 and on an as-needed basis throughout system operation.

Bi-weekly (every other week) to monthly O&M visits and bi-monthly (every other month) sampling events will be performed by Ensolum and/or Hilcorp personnel to ensure the DPE system is

operating within normal working ranges (i.e., temperature, pressure, and vacuum). Deviations from regular operations will be noted on field logs and included in the following quarterly report.

Reporting

Updated remediation reports will be prepared and submitted to the NMOCD on a quarterly basis within 15 days following the end of the quarter and will contain the following:

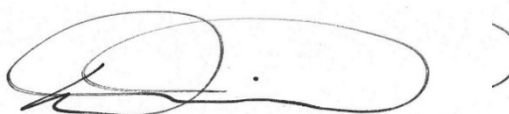
- A summary of remediation and monitoring activities during the period;
- System run-time summary;
- Petroleum hydrocarbon mass removal and fluid recovery from the remediation system;
- DPE volume liquid removal; and
- Groundwater monitoring results, when applicable.

We appreciate the opportunity to provide this report to the NMOCD. If you should have any questions or comments regarding this report, please contact the undersigned.

Sincerely,
Ensolum, LLC



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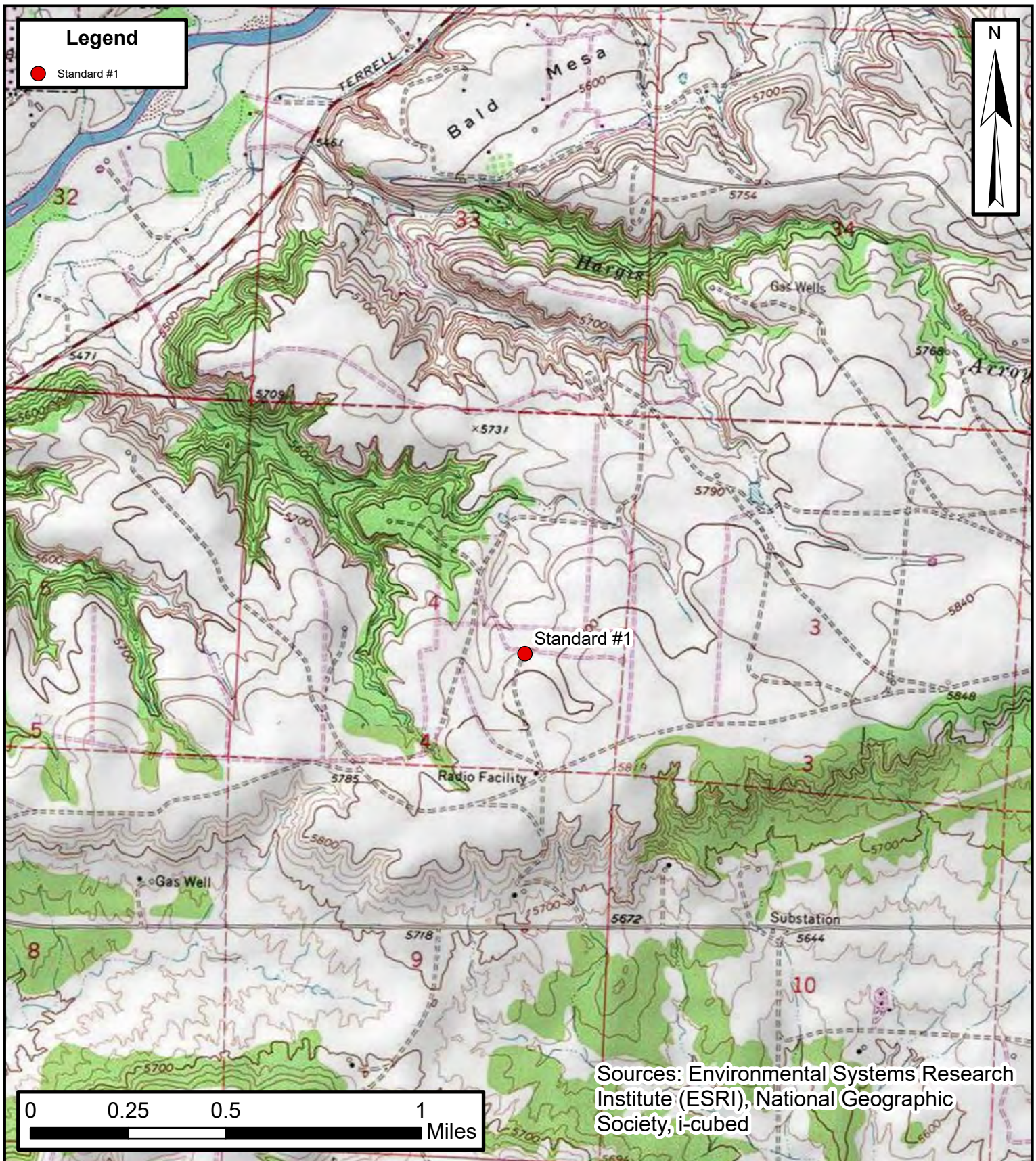
Daniel R. Moir, PG (licensed in WY & TX)
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Attachments:

Figure 1	Site Location Map
Figure 2	Site Features
Figure 3	Dual Phase Extraction System Layout
Figure 4	Groundwater Elevation Map – Q3 2024
Figure 5	Groundwater Analytical Results – Q3 2024
Table 1	Dual Phase Extraction System Runtime Calculations
Table 2	Dual Phase Extraction System Field Measurements
Table 3	Dual Phase Extraction System Air Analytical Results
Table 4	Dual Phase Extraction System Mass Removal and Emissions
Table 5	Dual Phase Extraction System Liquid Recovery
Table 6	Groundwater Elevation
Table 7	Groundwater Analytical Results
Graph 1	Oxygen vs Time
Graph 2	Carbon Dioxide vs Time
Appendix A	Field Notes
Appendix B	Project Photographs
Appendix C	Vapor Laboratory Analytical Report
Appendix D	Groundwater Laboratory Analytical Report
Appendix E	Correspondence



Figures



Site Location Map

Standard #1

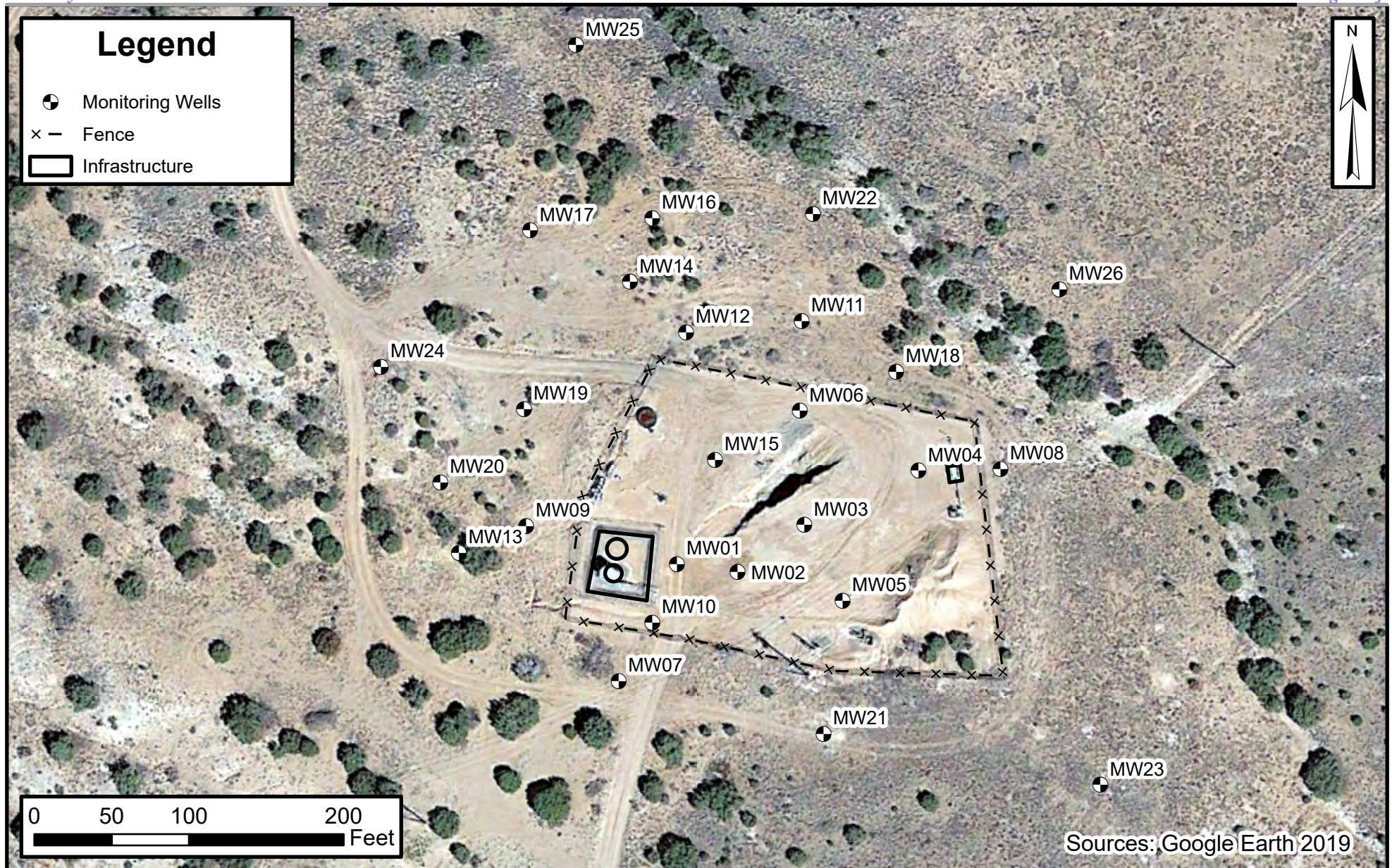
Hilcorp Energy Company

36.75285, -108.099744
San Juan County, New Mexico

FIGURE

1



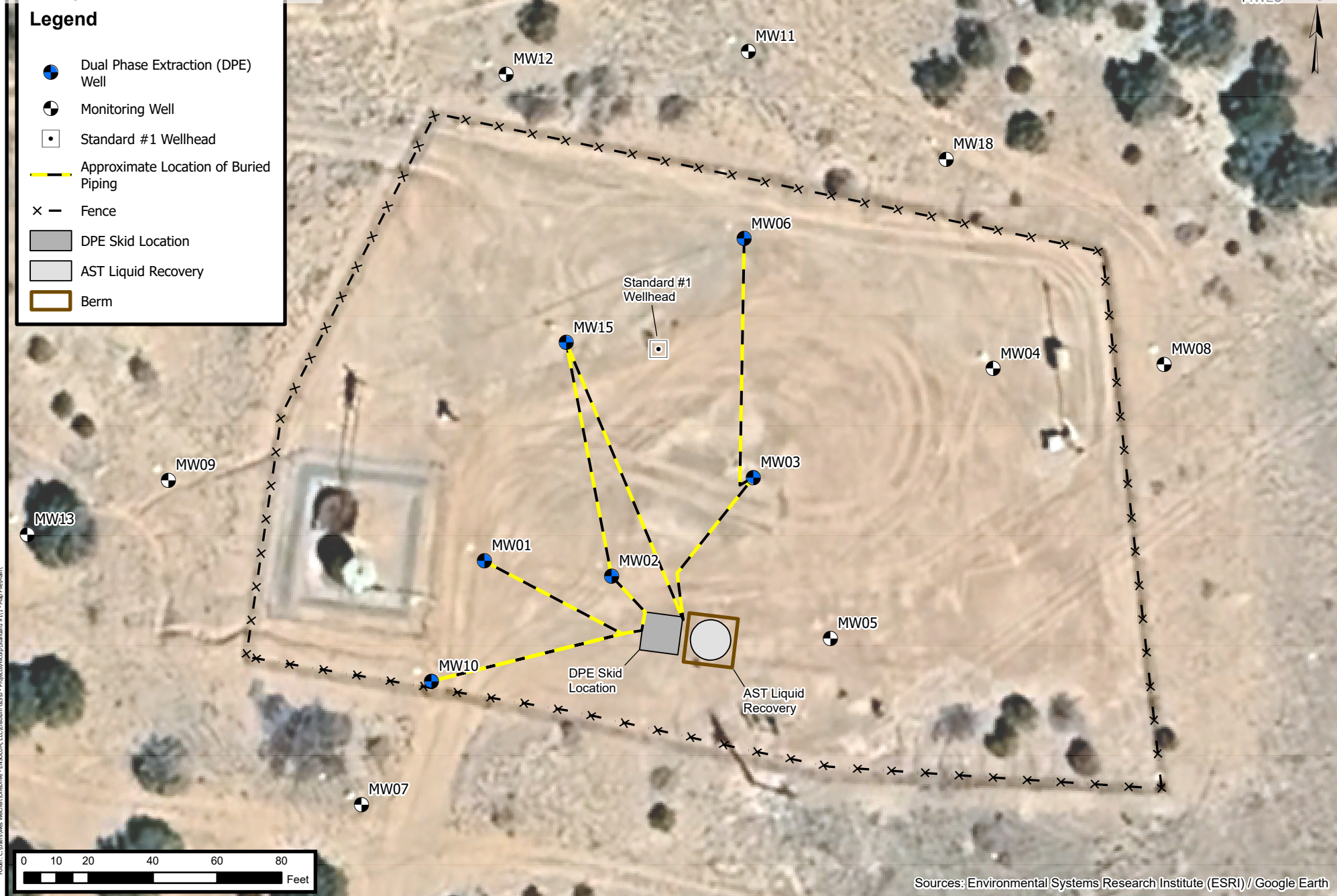


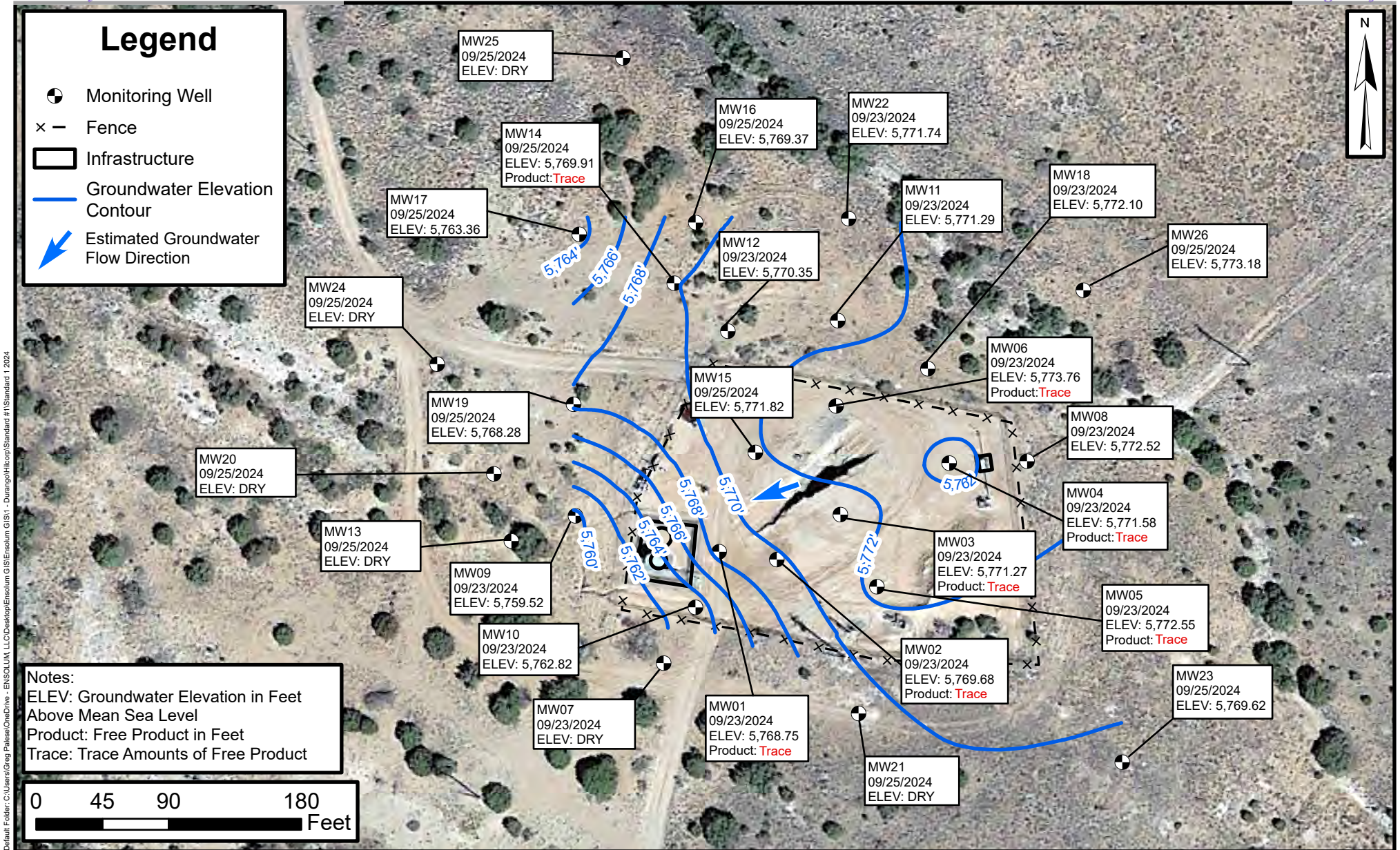
Site Features

Standard #1
Hilcorp Energy Company

36.75285, -108.099744
San Juan County, New Mexico

FIGURE
2



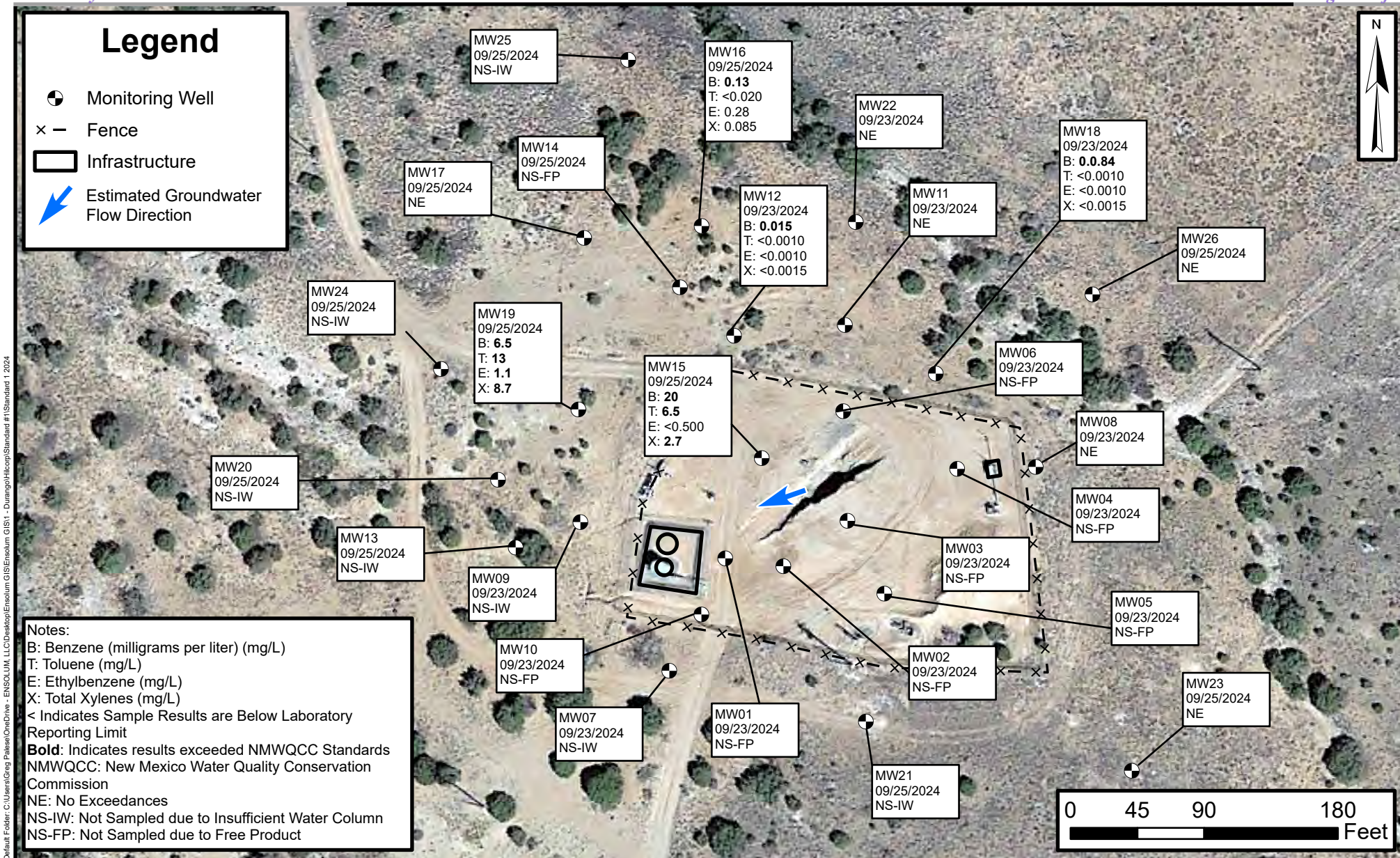


Groundwater Elevation Map - Q3 2024

Standard #1
 Hilcorp Energy Company
 36.75285, -108.099744
 San Juan County, New Mexico



FIGURE
 4



Groundwater Analytical Results - Q3 2024



Standard #1
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 36.75285, -108.099744
 San Juan County, New Mexico

FIGURE
5



Tables & Graphs



TABLE 1
DUAL PHASE EXTRACTION SYSTEM RUNTIME CALCULATIONS
 Standard #1
 Hilcorp Energy Company
 San Juan County, New Mexico

Date/Time of Reading	System Hour Runtime	Runtime Between Events	Run Time (%)	Cumulative Run Time (%)	Notes
1/2/2024	4	4	START UP		
3/21/2024	1,876	1,872	99%	99%	
4/1/2024	2,109	2,081	88%	97%	
4/5/2024	2,201	2,149	96%	97%	
4/19/2024	2,537	2,461	100%	98%	
5/7/2024	2,969	2,751	100%	98%	
5/21/2024	3,310	3,063	102%	98%	
6/6/2024	3,661	3,285	91%	98%	
6/27/2024	4,167	3,649	100%	98%	
7/17/2024	4,645	3,939	100%	98%	
7/29/2024	4,938	4,064	102%	98%	
8/12/2024	5,272	4,232	99%	98%	
8/23/2024	5,535	4,352	99%	98%	
9/5/2024	5,848	4,450	101%	99%	
9/23/2024	6,278	4,733	99%	99%	
3rd Qtr 2024 Run Time Hours				2,111	
3rd Qtr 2024 Run Time %				100%	

Notes:

?: percent

Dashed line indicates quarter change

--: not applicable/not collected



TABLE 2
DUAL PHASE EXTRACTION SYSTEM FIELD MEASUREMENTS

Standard #1
Hilcorp Energy Company
San Juan County, New Mexico

SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm) ⁽¹⁾	Vacuum (IHG)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
Influent, All Wells	1/2/2024	198	4.50	742	534	2.5	1.23	20.9	0.06
	1/3/2024	69	4.50	742	534	2.5	1.23	20.9	0.02
	1/4/2024	467	2.50	553	398	2.5	1.23	16.6	4.99
	1/5/2024	416	2.50	553	216	15.0	7.37	19.8	1.34
	1/11/2024	993	1.75	463	187	14.5	7.12	--	--
	1/18/2024	234	2.00	495	220	13.0	6.39	--	--
	1/24/2024	521	2.50	553	260	12.0	5.89	--	--
	2/1/2024	397	3.25	630	379	7.0	3.44	--	--
	2/8/2024	350	3.00	606	348	8.0	3.93	--	--
	2/15/2024	401	3.00	606	340	8.5	4.17	--	--
	2/21/2024	400	3.00	606	340	8.5	4.17	20.0	0.38
	3/1/2024	662	2.25	525	267	10.5	5.16	--	--
	3/7/2024	525	2.25	525	271	10.3	5.03	20.9	0.30
	3/14/2024	763	2.50	553	282	10.5	5.16	20.9	0.28
	3/21/2024	568	2.50	553	282	10.5	5.16	--	--
	4/1/2024	517	2.50	553	282	10.5	5.16	--	--
	4/5/2024	547	2.50	553	289	10.0	4.91	20.0	0.16
	4/19/2024	364	2.25	525	292	8.7	4.27	20.6	0.14
	5/7/2024	337	2.25	525	247	12.0	5.89	20.7	0.15
	5/21/2024	284	2.25	525	240	12.5	6.14	20.9	0.11
	6/6/2024	247	2.25	525	233	13.0	6.39	20.7	0.13
	6/27/2024	369	2.25	525	226	13.5	6.63	20.7	0.13
	7/17/2024	148	3.25	630	305	11.5	5.65	20.8	0.12
	7/29/2024	190	3.00	606	249	14.3	7.00	20.9	0.09
	8/12/2024	119	2.75	580	231	14.8	7.24	20.9	0.10
	8/23/2024	122	1.75	463	181	15.0	7.37	20.9	0.13
	9/5/2024	156	1.75	463	169	16.0	7.86	20.9	0.11
	9/23/2024	121	1.50	428	151	16.5	8.10	20.9	0.13
MW01	1/2/2024	102	--	--	44.0	1.0	0.49	20.9	0.08
	1/3/2024	87	--	--	14.0	1.0	0.49	20.9	0.04
	1/4/2024	--	--	--	93.0	13.5	6.63	--	--
	1/5/2024	403	--	--	53.0	13.0	6.39	20.7	0.58
	1/11/2024	135	0.95	85.2	42.3	11.0	5.40	--	--
	1/18/2024	655	0.08	24.7	11.6	12.0	5.89	--	--
	1/24/2024	1394	0.55	64.8	32.2	11.0	5.40	20.2	0.52
	2/1/2024	468	0.54	64.2	41.2	5.5	2.70	--	--
	2/8/2024	436	--	--	--	7.0	3.44	19.8	0.78
	2/15/2024	413	0.20	39.1	23.5	7.0	3.44	19.8	0.44
	2/21/2024	543	0.20	39.1	23.5	7.0	3.44	20.0	0.40
	3/1/2024	353	0.28	46.3	25.4	9.0	4.42	20.5	0.44
	3/7/2024	431	0.51	62.4	34.3	9.0	4.42	20.9	0.36
	3/14/2024	409	0.19	38.1	20.9	9.0	4.42	20.9	0.38
	3/21/2024	398	0.49	61.2	33.6	9.0	4.42	20.9	0.36
	4/1/2024	523	0.61	68.3	38.4	8.5	4.17	--	--
	4/5/2024	496	0.42	56.7	31.8	8.5	4.17	19.8	0.28
	4/19/2024	450	0.31	48.7	27.7	8.3	4.05	19.4	0.32
	5/7/2024	611	0.64	69.9	43.2	6.4	3.14	19.5	0.34
	5/21/2024	645	0.77	76.7	42.6	8.8	4.30	19.5	0.31
	6/6/2024	387	1.83	118.3	68.8	7.8	3.81	19.8	0.30
	6/27/2024	604	--	--	--	8.0	3.93	19.5	0.28
	7/17/2024	276	0.37	53.2	30.9	7.8	3.81	19.7	0.25
	7/29/2024	286	2.07	125.8	72.3	8.0	3.93	20.2	0.23
	8/12/2024	274	1.83	118.3	68.0	8.0	3.93	20.2	0.23
	8/23/2024	141	1.27	98.5	56.7	8.0	3.93	20.5	0.16
	9/6/2024	206	2.93	149.7	85.1	8.3	4.05	20.3	0.18
	9/23/2024	159	1.31	100.1	57.5	8.0	3.93	20.6	0.19
MW02	1/2/2024	102	--	--	20.0	1.0	0.49	20.9	0.02
	1/3/2024	240	--	--	25.0	1.0	0.49	20.9	0.06
	1/4/2024	--	--	--	86.0	13.5	6.63	--	--
	1/5/2024	243	--	--	84.0	12.5	6.14	20.6	0.82
	1/11/2024	392	0.80	78.2	38.8	11.0	5.40	--	--
	1/18/2024	335	1.05	89.6	42.1	12.0	5.89	--	--
	1/24/2024	710	0.75	75.7	38.6	10.5	5.16	20.7	0.52
	2/1/2024	179	0.15	33.9	21.2	6.0	2.95	--	--
	2/8/2024	380	--	--	--	7.3	3.56	20.7	0.54
	2/15/2024	232	0.21	40.1	23.6	7.5	3.68	20.3	0.32
	2/21/2024	175	0.15	33.9	20.4	7.0	3.44	20.6	0.18
	3/1/2024	315	0.56	65.4	35.9	9.0	4.42	20.9	0.36
	3/7/2024	396	0.64	69.9	38.4	9.0	4.42	20.9	0.24
	3/14/2024	412	0.64	69.9	38.4	9.0	4.42	20.9	0.20
	3/21/2024	408	0.61	68.3	37.5	9.0	4.42	20.9	0.18
	4/1/2024	257	0.13	31.5	17.3	9.0	4.42	--	--
	4/5/2024	294	0.55	64.8	35.6	9.0	4.42	20.1	0.16
	4/19/2024	249	0.37	53.2	29.9	8.5	4.17	20.2	0.17
	5/7/2024	193	0.25	43.7	24.6	8.5	4.17	20.3	0.14



TABLE 2 DUAL PHASE EXTRACTION SYSTEM FIELD MEASUREMENTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico									
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm) ⁽¹⁾	Vacuum (IHG)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
MW02	5/21/2024	193	0.54	64.2	36.1	8.5	4.17	20.4	0.16
	6/6/2024	173	0.44	58.0	31.1	9.5	4.67	20.3	0.19
	6/27/2024	321	0.40	55.3	28.9	10.0	4.91	20.1	0.17
	7/17/2024	118	0.13	31.5	16.3	10.3	5.03	20.9	0.15
	7/29/2024	88	0.46	59.3	30.6	10.3	5.03	20.9	0.10
	8/12/2024	110	0.16	35.0	18.0	10.3	5.03	20.9	0.13
	8/23/2024	47	0.08	24.7	12.3	11.0	5.40	20.9	0.06
	9/6/2024	128	Gauge Broken	--	--	11.3	5.53	20.8	0.07
	9/23/2024	78	0.11	29.0	14.8	10.5	5.16	20.7	0.20
MW03	1/2/2024	139	--	--	45.0	1.0	0.49	20.9	0.14
	1/3/2024	240	--	--	25.0	1.0	0.49	20.9	0.06
	1/4/2024	--	--	--	37.0	13.0	6.39	--	--
	1/5/2024	332	--	--	18.0	12.0	5.89	18.9	1.56
	1/11/2024	187	1.30	99.7	44.3	13.0	6.39	--	--
	1/18/2024	452	1.11	92.1	36.1	15.0	7.37	--	--
	1/24/2024	1775	0.62	68.8	30.6	13.0	6.39	19.2	1.26
	2/1/2024	644	0.24	42.8	24.1	8.5	4.17	--	--
	2/8/2024	325	--	--	--	9.5	4.67	19.0	1.30
	2/15/2024	235	0.23	41.9	21.9	10.0	4.91	20.3	0.28
	2/21/2024	498	--	--	--	--	--	19.1	0.72
	3/1/2024	404	0.13	31.5	14.8	12.0	5.89	19.7	1.04
	3/7/2024	721	0.41	56.0	27.1	11.5	5.65	20.2	0.66
	3/14/2024	687	0.35	51.7	25.0	11.5	5.65	20.4	0.44
	3/21/2024	627	0.36	52.5	25.4	11.5	5.65	20.3	0.45
	4/1/2024	433	0.45	58.6	28.3	11.5	5.65	--	--
	4/5/2024	511	0.71	73.7	36.6	11.0	5.40	19.3	0.39
	4/19/2024	433	0.23	41.9	20.8	11.0	5.40	19.4	0.38
	5/7/2024	671	0.65	70.5	39.6	8.5	4.17	19.9	0.34
	5/21/2024	444	0.28	46.3	25.1	9.3	4.54	19.6	0.35
	6/6/2024	438	0.43	57.3	31.1	9.3	4.54	19.4	0.36
	6/27/2024	420	0.18	37.1	19.4	10.0	4.91	19.5	0.38
	7/17/2024	439	0.54	64.2	34.8	9.3	4.54	19.6	0.32
	7/29/2024	398	0.85	80.6	43.7	9.3	4.54	20.2	0.26
	8/12/2024	413	0.66	71.0	38.5	9.3	4.54	20.1	0.28
	8/23/2024	364	2.33	133.5	75.0	8.5	4.17	19.7	0.40
	9/6/2024	457	0.12	30.3	16.8	8.8	4.30	20.2	0.30
	9/23/2024	381	0.83	79.7	43.7	9.0	4.42	19.8	0.39
MW06	1/2/2024	153	--	--	48.0	1.0	0.49	20.9	0.14
	1/3/2024	161	--	--	23.0	1.0	0.49	20.9	0.04
	1/4/2024	--	--	--	48.0	12.0	5.89	--	--
	1/5/2024	295	--	--	26.0	11.5	5.65	19.1	1.41
	1/11/2024	323	1.18	95.0	47.1	11.0	5.40	--	--
	1/18/2024	35	1.12	92.5	42.3	12.5	6.14	--	--
	1/24/2024	439	0.40	55.3	28.2	10.5	5.16	20.9	0.56
	2/1/2024	245	0.17	36.0	23.1	5.5	2.70	--	--
	2/8/2024	220	--	--	--	7.0	3.44	20.9	0.42
	2/15/2024	120	0.15	33.9	20.4	7.0	3.44	20.9	0.12
	2/21/2024	319	0.22	41.0	24.4	7.2	3.54	20.6	0.20
	3/1/2024	121	0.04	17.5	9.6	9.0	4.42	20.9	0.24
	3/7/2024	314	0.65	70.5	38.7	9.0	4.42	20.9	0.16
	3/14/2024	402	0.30	47.9	26.3	9.0	4.42	20.9	0.20
	3/21/2024	372	0.27	45.4	25.5	8.5	4.17	20.9	0.15
	4/1/2024	134	0.04	17.5	9.6	9.0	4.42	--	--
	4/5/2024	202	0.82	79.2	44.5	8.5	4.17	20.2	0.10
	4/19/2024	154	0.34	51.0	28.7	8.5	4.17	20.2	0.12
	5/7/2024	145	0.18	37.1	20.4	9.0	4.42	20.8	0.12
	5/21/2024	139	0.46	59.3	32.9	8.8	4.30	20.3	0.11
	6/6/2024	152	0.84	80.1	45.6	8.3	4.05	20.3	0.12
	6/27/2024	129	--	--	--	8.0	3.93	20.3	0.12
	7/17/2024	51	0.01	8.7	5.0	8.0	3.93	20.4	0.10
	7/29/2024	54	0.63	69.4	39.9	8.0	3.93	20.7	0.10
	8/8/2024	56	0.43	57.3	33.0	8.0	3.93	20.6	0.10
	8/23/2024	34	0.12	30.3	17.6	7.8	3.81	20.7	0.09
	9/6/2024	49	0.03	15.1	8.8	7.8	3.81	20.6	0.10
	9/23/2024	36	0.31	48.7	28.0	8.0	3.93	20.8	0.10
MW10	1/2/2024	104	--	--	44.0	1.0	0.49	20.9	0.08
	1/3/2024	92	--	--	16.0	1.0	0.49	20.9	0.02
	1/4/2024	--	--	--	85.0	14.0	6.88	--	--
	1/5/2024	147	--	--	69.0	13.5	6.63	20.9	0.36
	1/11/2024	59	0.88	82	43.9	9.5	4.67	--	--
	1/18/2024	256	0.77	77	35.1	12.5	6.14	--	--
	1/24/2024	7	0.62	69	34.2	11.0	5.40	20.9	0.00
	2/1/2024	435	0.21	40	26.2	5.0	2.46	--	--
	2/8/2024	381	--	--	--	7.0	3.44	20.9	0.32
	2/15/2024	205	0.05	20	11.8	7.0	3.44	20.6	0.18



TABLE 2 DUAL PHASE EXTRACTION SYSTEM FIELD MEASUREMENTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico									
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm) ⁽¹⁾	Vacuum (IHG)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
MW10	2/21/2024	204	0.03	15	9.1	7.0	3.44	20.7	0.16
	3/1/2024	91	0.12	30	16.6	9.0	4.42	20.9	0.12
	3/7/2024	60	0.34	51	28.0	9.0	4.42	20.9	0.18
	3/14/2024	75	0.57	66	36.2	9.0	4.42	20.9	0.16
	3/21/2024	77	0.48	61	33.2	9.0	4.42	20.9	0.13
	4/1/2024	280	0.00	0	0.0	9.0	4.42	--	--
	4/5/2024	321	0.69	73	39.9	9.0	4.42	20.4	0.13
	4/19/2024	297	0.17	36	20.3	8.5	4.17	20.5	0.14
	5/7/2024	242	0.12	30	17.0	8.5	4.17	20.6	0.13
	5/21/2024	234	0.06	21	12.0	8.5	4.17	20.7	0.13
	6/6/2024	196	0.04	17	9.5	9.3	4.54	20.8	0.16
	6/27/2024	302	0.22	41	21.4	10.0	4.91	20.8	0.15
	7/17/2024	66	--	--	--	10.3	5.03	20.9	0.11
	7/29/2024	61	--	--	--	10.3	5.03	20.9	0.10
	8/12/2024	61	0.56	65	33.8	10.3	5.03	20.9	0.11
	8/23/2024	51	0.89	82	40.4	11.3	5.53	20.9	0.08
	9/6/2024	80	Gauge Broken	--	--	11.0	5.40	20.9	0.08
	9/23/2024	50	0.87	82	41.6	10.5	5.16	20.8	0.14
MW15	1/2/2024	126	--	--	46.0	1.0	0.49	20.9	0.12
	1/3/2024	125	--	--	20.0	1.0	0.49	20.9	0.02
	1/4/2024	--	--	--	45.0	11.5	5.65	--	--
	1/5/2024	138	--	--	43.0	11.5	5.65	20.9	0.10
	1/11/2024				Frozen				
	1/18/2024	124	3.78	170.0	79.9	12.0	5.89	--	--
	1/24/2024	425	0.18	37.1	20.8	8.5	4.17	20.9	0.18
	2/1/2024	34	0.12	30.3	19.0	6.0	2.95	--	--
	2/8/2024	90	--	--	--	5.0	2.43	20.9	0.06
	2/15/2024	25	0.05	19.5	11.8	7.0	3.44	20.9	0.08
	2/21/2024	57	--	--	--	--	--	20.9	0.08
	3/1/2024	129	0.07	23.1	12.7	9.0	4.42	20.9	0.00
	3/7/2024	114	0.16	35.0	19.2	9.0	4.42	20.9	0.00
	3/14/2024	130	0.13	31.5	17.3	9.0	4.42	20.9	0.00
	3/21/2024	122	0.13	31.5	17.3	9.0	4.42	20.9	0.00
	4/1/2024	25	0.30	47.9	26.3	9.0	4.42	--	--
	4/5/2024	34	0.23	41.9	23.6	8.5	4.17	20.4	0.00
	4/19/2024	73	0.03	15.1	8.5	8.5	4.17	20.6	0.00
	5/7/2024	50	0.24	42.8	24.1	8.5	4.17	20.8	0.00
	5/21/2024	23	0.24	42.8	24.1	8.5	4.17	20.5	0.00
	6/6/2024	269	0.00	0.0	0.0	9.0	4.42	20.3	0.17
	6/27/2024	169	0.52	63.0	33.8	9.5	4.67	20.4	0.02
	7/17/2024	10	0.02	12.4	6.4	10.3	5.03	20.9	0.11
	7/29/2024	16	0.09	26.2	13.7	10.0	4.91	20.9	0.00
	8/12/2024	19	0.03	15.1	7.8	10.3	5.03	20.9	0.00
	8/23/2024	13	0.02	12.4	6.5	10.0	4.91	20.9	0.00
	9/6/2024	27	Gauge Broken	--	--	10.8	5.28	20.9	0.00
	9/23/2024	32	0.02	12.4	6.4	10.3	5.03	20.7	0.10

Notes:
(1) Individual Well Flow Rates in scfm estimated based on rotometer readings from 1/2/24 to 1/5/24
IHG: inches of mercury
PID: photoionization detector
ppm: parts per million
acfm: actual cubic feet per minute
scfm: standard cubic feet per minute
%: percent
--: not measured



TABLE 3 DUAL PHASE EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico								
Date	PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH/GRO (µg/L)	Oxygen (%)	Carbon Dioxide (%)
1/2/2024	198	0.58	2.8	0.42	8.9	170	21.64	0.09
1/3/2024	69	0.21	1.2	0.24	5.0	69	21.71	0.06
1/4/2024	467	29	40	<5.0	18	3,400	17.40	4.80
1/5/2024	416	18	26	<5.0	8.7	2,300	20.83	1.26
1/12/2024 ⁽¹⁾	993	22	42	<5.0	56	6,500	20.53	1.49
1/18/2024	234	21	28	<5.0	10	2,700	21.30	0.42
1/24/2024	523	22	40	<5.0	30	4,400	21.19	0.57
2/8/2024	350	19	31	<5.0	34	2,200	21.33	0.51
2/21/2024	400	13	18	<2.0	18	2,900	19.74	0.40
3/7/2024	525	14	28	<5.0	36	2,100	21.91	0.30
3/21/2024	568	15	27	1.1	34	2,900	21.57	0.29
5/7/2024	337	5.2	9.2	<2.0	10	1,400	22.02	0.31
7/30/2024 ⁽²⁾	190	3.9	7.3	<2.0	6.6	980	21.14	0.27
9/5/2024	156	3.2	8.1	<2.0	6.6	680	22.07	0.21

Notes:
GRO: gasoline range organics
µg/L: microgram per liter
PID: photoionization detector
ppm: parts per million
(1) PID reading is from 1/11/2024
(2) PID Reading is from 7/29/2024

TVPH: total volatile petroleum hydrocarbons
%: percent
--: not sampled



TABLE 4
DUAL PHASE EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS

Standard #1
Hilcorp Energy Company
San Juan County, New Mexico

Laboratory Analysis

Date	PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH (µg/L)
1/2/2024	198	0.58	2.8	0.42	8.9	170
1/3/2024	69	0.21	1.2	0.24	5.0	69
1/4/2024	467	29	40	<5.0	18	3,400
1/5/2024	416	18	26	<5.0	8.7	2,300
1/12/2024 ⁽¹⁾	993	22	42	<5.0	56	6,500
1/18/2024	234	21	28	<5.0	10	2,700
1/24/2024	523	22	40	<5.0	30	4,400
2/8/2024	350	19	31	<5.0	34	2,200
2/21/2024	400	13	18	<2.0	18	2,900
3/7/2024	525	14	28	<5.0	36	2,100
3/21/2024	568	15	27	1.1	34	2,900
5/7/2024	337	5.2	9.2	<2.0	10	1,400
7/30/2024 ⁽²⁾	190	3.9	7.3	<2.0	6.6	980
9/5/2024	156	3.2	8.1	<2.0	6.6	680
Average	388	13	22	3	20	2,336

Vapor Extraction Summary

Date	Flow Rate (scfm)	Total System Flow (cf)	Delta Flow (cf)	Benzene (lb/hr)	Toluene (lb/hr)	Ethylbenzene (lb/hr)	Total Xylenes (lb/hr)	TVPH (lb/hr)
1/2/2024	534	0	0	0.0012	0.0056	0.0008	0.0178	0.34
1/3/2024	534	762,552	762,552	0.0008	0.0040	0.0007	0.0139	0.24
1/4/2024	398	1,347,612	585,060	0.0217	0.0307	0.0039	0.0171	2.58
1/5/2024	216	1,648,284	300,672	0.0190	0.0267	0.0040	0.0108	2.30
1/12/2024 ⁽¹⁾	187	3,569,148	1,920,864	0.0140	0.0238	0.0035	0.0226	3.08
1/18/2024	220	5,271,948	1,702,800	0.0177	0.0288	0.0041	0.0272	3.78
1/24/2024	260	7,487,148	2,215,200	0.0209	0.0331	0.0049	0.0194	3.45
2/8/2024	340	14,749,548	7,262,400	0.0261	0.0451	0.0064	0.0407	4.20
2/21/2024	340	21,055,188	6,305,640	0.0203	0.0312	0.0045	0.0331	3.24
3/7/2024	271	26,939,682	5,884,494	0.0137	0.0233	0.0035	0.0274	2.53
3/21/2024	282	32,540,202	5,600,520	0.01529	0.0290	0.00322	0.0369	2.64
5/7/2024	247	48,738,462	16,198,260	0.00933	0.0167	0.00143	0.0203	1.99
7/30/2024 ⁽²⁾	249	78,153,828	29,415,366	0.00424	0.0077	0.00186	0.0077	1.11
9/5/2024	151	86,402,958	8,249,130	0.00200	0.0043	0.00113	0.0037	0.47
Average				0.0133	0.022	0.0031	0.021	2.28

Mass Recovery

Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
1/2/2024	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/3/2024	28	24	0.0	0.1	0.0	0.3	5.7	0.0
1/4/2024	53	25	0.5	0.8	0.1	0	63	0.03
1/5/2024	76	23	0.4	0.6	0.1	0.3	53	0.03
1/12/2024 ⁽¹⁾	247	171	2.4	4.1	0.6	4	527	0.26
1/18/2024	376	129	2.3	3.7	0.5	4	488	0.24
1/24/2024	518	142	3.0	4.7	0.7	2.8	490	0.25
2/8/2024	874	356	9.3	16	2.3	14	1,494	0.75
2/21/2024	1,183	309	6.29	9.6	1.4	10	1,002	0.50
3/7/2024	1,545	362	4.95	8.4	1.3	10	917	0.46
3/21/2024	1,876	331	5.06	9.6	1.06	12.2	873	0.44
5/7/2024	2,969	1,093	10.20	18.3	1.57	22.2	2,171	1.09
7/30/2024 ⁽²⁾	4,938	1,969	8.34	15.1	3.67	15.2	2,182	1.09
9/5/2024	5,848	911	1.83	4.0	1.03	3.4	427	0.21
Total Mass Recovery to Date			55	95	14	99	10,693	5.3

Notes:

cf: cubic feet

cfm: cubic feet per minute

µg/L: micrograms per liter

lb/hr: pounds per hour

--: not sampled

PID: photoionization detector

ppm: parts per million

TVPH: total volatile petroleum hydrocarbons

Laboratory detection limit used to estimate mass removal

(1) PID reading, flow rate, and hour meter are from 1/11/2024

(2) PID reading, flow rate, and hour meter are from 7/29/2024



TABLE 5 LIQUID RECOVERY Standard #1 Hilcorp Energy Company San Juan County, New Mexico									
Date/Time	Hour Meter Reading	Flow Meter Reading (gal)	Gallons Recovered this Period	Cumulative Volume Recovered (gal)	Time Period (hr:min:sec)	Time Period (min)	Recovery Rate		Notes
							(gpm)	(gal/day)	
1/11/24 13:15	219	2,648	0	0	--	--	--	--	
1/18/24 14:05	376	8,518	5,870	5,870	168:50:00	10,130	0.58	834	
1/24/24 12:30	518	12,337	3,819	9,689	142:25:00	8,545	0.45	644	
2/1/24 11:00	707	14,170	1,834	11,522	190:30:00	11,430	0.16	231	
2/8/24 10:39	874	17,328	3,158	14,680	167:39:00	10,059	0.31	452	
2/15/24 10:40	1,040	21,029	3,701	18,381	168:01:00	10,081	0.37	529	
2/21/24 10:05	1,183	23,866	2,837	21,218	143:25:00	8,605	0.33	475	
3/1/24 13:20	1,399	28,034	4,168	25,385	219:15:00	13,155	0.32	456	
3/7/24 14:50	1,545	32,076	4,042	29,428	145:30:00	8,730	0.46	667	
3/14/24 13:05	1,710	36,362	4,286	33,713	166:15:00	9,975	0.43	619	
3/21/24 10:02	1,876	40,443	4,082	37,795	164:57:00	9,897	0.41	594	
4/1/24 13:00	--	--	--	--	--	--	--	--	
4/5/24 10:00	2,201	48,058	7,614	45,409	359:58:00	21,598	0.35	508	
4/19/24 10:44	2,537	55,292	7,234	52,643	336:44:00	20,204	0.36	516	
5/7/24 10:07	2,969	63,559	8,268	60,911	431:23:00	25,883	0.32	460	
5/21/24 16:22	3,310	69,749	6,190	67,101	342:15:00	20,535	0.30	434	
6/6/24 11:11	3,661	75,626	5,877	72,977	378:49:00	22,729	0.26	372	
6/27/24 13:30	4,167	84,339	8,714	81,691	506:19:00	30,379	0.29	413	
7/17/24 11:33	4,645	92,352	8,013	89,704	478:03:00	28,683	0.28	402	
7/29/24 16:29	4,938	97,043	4,691	94,395	292:56:00	17,576	0.27	384	
8/12/24 14:38	5,272	101,851	4,808	99,203	334:09:00	20,049	0.24	345	
8/23/24 13:05	5,535	105,583	3,732	102,935	262:27:00	15,747	0.24	341	
9/5/24 14:56	5,848	109,915	4,332	107,267	313:51:00	18,831	0.23	331	
9/23/24 12:05	6,278	115,338	5,423	112,689	429:09:00	25,749	0.21	303	

Notes:

- bbl: barrel

ft: feet

gal: gallon

gal/day: gallon per day

gpm: gallon per minute

hr: hour
- in: inch

min: minute

sec: second

Dashed line indicated quarter change

--: not applicable

Total Quantity of Liquid Removed:	112,689 Gal
	2,683 bbl



TABLE 6
GROUNDWATER ELEVATION
 Standard #1
 Hilcorp Energy Company
 San Juan County, New Mexico

Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW01	5,789.08	10/22/2018	20.80	20.97	0.17	5,768.25
		3/29/2019	20.69	21.35	0.66	5,768.26
		6/28/2019	20.70	21.44	0.74	5,768.23
		9/17/2019	20.64	20.83	0.19	5,768.40
		12/17/2019	20.50	20.89	0.39	5,768.50
		3/12/2020	20.49	20.76	0.27	5,768.54
		6/25/2020	20.39	20.65	0.26	5,768.64
		9/23/2020	20.19	20.46	0.27	5,768.84
		3/21/2021	20.11	20.20	0.09	5,768.95
		6/14/2021	Trace	20.18	Trace	5,768.90
		9/20/2021	--	19.62	--	5,769.46
		12/2/2021	Trace	19.50	Trace	5,769.58
		3/1/2022	Trace	19.62	Trace	5,769.46
		6/7/2022	Trace	19.39	Trace	5,769.69
		9/29/2022	19.08	19.10	0.02	5,770.00
		12/8/2022	19.05	19.12	0.07	5,770.02
		3/2/2023	18.91	18.93	0.02	5,770.17
		6/16/2023	18.80	18.90	0.10	5,770.26
		9/15/2023	--	18.55	--	5,770.53
		12/14/2023	--	--	--	--
MW02	5,789.36	3/27/2024	--	20.18	--	5,768.90
		6/3/2024	Trace	20.19	Trace	5,768.89
		9/23/2024	Trace	20.33	Trace	5,768.75
		10/22/2018	--	21.12	--	5,768.24
		3/29/2019	20.85	21.11	0.26	5,768.46
		6/28/2019	20.95	21.30	0.35	5,768.34
		9/17/2019	20.80	20.85	0.05	5,768.55
		12/17/2019	--	20.74	--	5,768.62
		3/12/2020	--	20.65	--	5,768.71
		6/25/2020	--	20.58	--	5,768.78
		9/23/2020	--	20.43	--	5,768.93
		3/31/2021	--	20.29	--	5,769.07
		6/14/2021	Trace	20.21	Trace	5,769.15
		9/20/2021	--	19.77	--	5,769.59
		12/3/2021	--	19.68	--	5,769.68
		3/1/2022	--	19.83	--	5,769.53
		6/7/2022	Trace	19.56	Trace	5,769.80
		9/29/2022	--	19.26	--	5,770.10
		12/8/2022	--	19.22	--	5,770.14
		3/2/2023	Trace	19.06	Trace	5,770.30
		6/16/2023	Trace	18.90	Trace	5,770.46
		9/15/2023	--	18.79	--	5,770.57
		12/14/2023	--	--	--	--
		3/27/2024	--	19.69	--	5,769.67
		6/3/2024	Trace	19.57	Trace	5,769.79
		9/23/2024	Trace	19.68	Trace	5,769.68



TABLE 6
GROUNDWATER ELEVATION
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Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW03	5,792.06	10/22/2018	--	DRY	--	DRY
		3/29/2019	--	30.90	--	5,761.16
		6/28/2019	--	32.14	--	5,759.92
		9/17/2019	--	27.32	--	5,764.74
		12/17/2019	--	23.75	--	5,768.31
		3/12/2020	--	23.40	--	5,768.66
		6/25/2020	--	23.25	--	5,768.81
		9/23/2020	--	23.08	--	5,768.98
		3/31/2021	--	22.81	--	5,769.25
		6/14/2021	--	22.61	--	5,769.45
		9/24/2021	22.24	22.25	0.01	5,769.82
		12/3/2021	--	22.17	--	5,769.89
		3/1/2022	--	22.30	--	5,769.76
		6/7/2022	--	22.04	--	5,770.02
		9/29/2022	--	21.71	--	5,770.35
		12/8/2022	--	21.69	--	5,770.37
		3/2/2023	--	21.46	--	5,770.60
		6/16/2023	--	21.29	--	5,770.77
		9/15/2023	--	21.20	--	5,770.86
		12/14/2023	--	--	--	--
MW04	5,792.35	3/27/2024	--	20.46	--	5,771.60
		6/3/2024	--	23.22	--	5,768.84
		9/23/2024	Trace	20.79	Trace	5,771.27
		10/22/2018	--	31.80	--	5,760.55
		3/29/2019	--	DRY	--	DRY
		6/28/2019	--	DRY	--	DRY
		9/17/2019	--	31.88	--	5,760.47
		12/17/2019	--	31.87	--	5,760.48
		3/12/2020	--	DRY	--	DRY
		6/25/2020	--	31.89	--	5,760.46
		9/23/2020	--	30.99	--	5,761.36
		3/31/2021	--	28.31	--	5,764.04
		6/14/2021	--	26.98	--	5,765.37
		9/24/2021	--	24.85	--	5,767.50
		12/3/2021	--	22.12	--	5,770.23
		3/1/2022	--	22.52	--	5,769.83
		6/7/2022	--	21.38	--	5,770.97
		9/29/2022	--	21.13	--	5,771.22
		12/8/2022	Trace	21.00	Trace	5,771.35
		3/2/2023	--	20.72	--	5,771.63
		6/16/2023	Trace	20.45	Trace	5,771.90
		9/15/2023	--	20.49	--	5,771.86
		12/14/2023	--	20.47	--	5,771.88
		3/27/2024	Trace	20.60	Trace	5,771.75
		6/3/2024	--	20.48	--	5,771.87
		9/23/2024	Trace	20.77	Trace	5,771.58



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Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW05	5,792.60	10/22/2018	--	28.39	--	5,764.21
		3/29/2019	--	24.65	--	5,767.95
		6/28/2019	--	24.53	--	5,768.07
		9/17/2019	--	21.41	--	5,771.19
		12/17/2019	--	21.25	--	5,771.35
		3/12/2020	--	21.10	--	5,771.50
		6/25/2020	--	21.13	--	5,771.47
		9/23/2020	--	20.93	--	5,771.67
		3/31/2021	--	20.76	--	5,771.84
		6/14/2021	--	20.61	--	5,771.99
		9/24/2021	--	20.37	--	5,772.23
		12/3/2021	--	20.41	--	5,772.19
		3/1/2022	--	20.58	--	5,772.02
		6/7/2022	Trace	20.24	Trace	5,772.36
		9/29/2022	Trace	20.02	Trace	5,772.58
		12/8/2022	Trace	19.97	Trace	5,772.63
		3/2/2023	Trace	19.82	Trace	5,772.78
		6/16/2023	Trace	19.63	Trace	5,772.97
		9/15/2023	--	19.61	--	5,772.99
		12/14/2023	--	19.61	--	5,772.99
		3/27/2024	Trace	20.12	Trace	5,772.48
		6/3/2024	Trace	20.03	Trace	5,772.57
		9/23/2024	Trace	20.05	Trace	5,772.55
MW06	5,792.31	10/22/2018	24.08	24.48	0.40	5,768.15
		3/29/2019	23.55	24.00	0.45	5,768.67
		6/28/2019	23.72	23.95	0.23	5,768.54
		9/17/2019	20.67	20.75	0.08	5,771.62
		12/17/2019	20.61	20.62	0.01	5,771.70
		3/12/2020	--	20.43	--	5,771.88
		6/25/2020	--	20.36	--	5,771.95
		9/23/2020	--	20.16	--	5,772.15
		3/31/2021	--	19.89	--	5,772.42
		6/14/2021	Trace	19.63	Trace	5,772.68
		9/24/2021	--	19.27	--	5,773.04
		12/3/2021	--	19.27	--	5,773.04
		3/1/2022	--	19.43	--	5,772.88
		6/7/2022	--	19.11	--	5,773.20
		9/29/2022	Trace	18.80	Trace	5,773.51
		12/8/2022	Trace	18.76	Trace	5,773.55
		3/2/2023	Trace	18.52	Trace	5,773.79
		6/16/2023	Trace	18.29	Trace	5,774.02
		9/15/2023	--	18.25	--	5,774.06
		12/14/2023	--	--	--	--
		3/27/2024	--	18.57	--	5,773.74
		6/3/2024	Trace	19.10	Trace	5,773.21
		9/23/2024	Trace	18.55	Trace	5,773.76



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Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW07	5,791.15	10/22/2018	--	DRY	--	DRY
		3/29/2019	--	DRY	--	DRY
		6/28/2019	--	DRY	--	DRY
		9/17/2019	--	DRY	--	DRY
		12/17/2019	--	DRY	--	DRY
		3/12/2020	--	DRY	--	DRY
		6/25/2020	--	DRY	--	DRY
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/2/2021	--	DRY	--	DRY
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	DRY	--	DRY
		9/29/2022	--	21.80	--	5,769.35
		12/8/2022	--	22.56	--	5,768.59
		3/2/2023	--	22.32	--	5,768.83
		6/16/2023	--	21.42	--	5,769.73
		9/15/2023	--	DRY	--	DRY
		12/14/2023	--	--	--	--
		3/27/2024	--	--	--	--
		6/3/2024	--	DRY	--	DRY
		9/23/2024	--	DRY	--	DRY
MW08	5,792.42	10/22/2018	--	DRY	--	DRY
		3/29/2019	--	DRY	--	DRY
		6/28/2019	--	24.07	--	5,768.35
		9/17/2019	--	23.81	--	5,768.61
		12/17/2019	--	23.42	--	5,769.00
		3/12/2020	--	23.37	--	5,769.05
		6/25/2020	--	23.28	--	5,769.14
		9/23/2021	--	22.88	--	5,769.54
		3/31/2021	--	22.14	--	5,770.28
		6/14/2021	--	21.67	--	5,770.75
		9/24/2021	--	21.52	--	5,770.90
		12/2/2021	--	21.76	--	5,770.66
		3/1/2022	--	21.81	--	5,770.61
		6/7/2022	--	21.17	--	5,771.25
		9/29/2022	--	21.02	--	5,771.40
		12/8/2022	--	20.85	--	5,771.57
		3/2/2023	--	20.52	--	5,771.90
		6/16/2023	--	20.22	--	5,772.20
		9/14/2023	--	20.32	--	5,772.10
		12/14/2023	--	20.26	--	5,772.16
		3/27/2024	--	20.18	--	5,772.24
		6/3/2024	--	20.05	--	5,772.37
		9/23/2024	--	19.90	--	5,772.52



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Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW09	5,786.16	10/22/2018	--	DRY	--	DRY
		3/29/2019	--	DRY	--	DRY
		6/28/2019	--	DRY	--	DRY
		9/17/2019	--	DRY	--	DRY
		12/17/2019	--	DRY	--	DRY
		3/12/2020	--	DRY	--	DRY
		6/25/2020	--	DRY	--	DRY
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/2/2021	--	DRY	--	DRY
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	DRY	--	DRY
		9/29/2022	--	DRY	--	DRY
		12/8/2022	--	DRY	--	DRY
		3/2/2023	--	DRY	--	DRY
		6/16/2023	--	22.61	--	5,763.55
		9/15/2023	--	17.37	--	5,768.79
		12/15/2023	--	17.38	--	5,768.78
		3/28/2024	--	24.74	--	5,761.42
		6/3/2024	--	26.65	--	5,759.51
		9/23/2024	--	26.64	--	5,759.52
MW10	5,789.30	10/22/2018	--	32.26	--	5,757.04
		3/29/2019	21.73	22.04	0.31	5,767.51
		6/28/2019	21.55	21.94	0.39	5,767.67
		9/17/2019	21.23	21.55	0.32	5,768.01
		12/17/2019	20.88	21.71	0.83	5,768.25
		3/12/2020	20.81	21.68	0.87	5,768.32
		6/25/2020	20.75	21.43	0.68	5,768.41
		9/23/2020	20.51	21.03	0.52	5,768.69
		3/31/2021	20.42	20.63	0.21	5,768.84
		6/14/2021	Trace	20.71	Trace	5,768.59
		9/24/2021	--	19.92	--	5,769.38
		12/3/2021	--	19.80	--	5,769.50
		3/1/2022	--	19.95	--	5,769.35
		6/7/2022	Trace	19.70	Trace	5,769.60
		9/29/2022	Trace	19.43	Trace	5,769.87
		12/8/2022	Trace	19.40	Trace	5,769.90
		3/2/2023	Trace	19.27	Trace	5,770.03
		6/16/2023	Trace	19.11	Trace	5,770.19
		9/15/2023	--	19.00	--	5,770.30
		12/15/2023	--	--	--	--
		3/28/2024	--	24.62	--	5,764.68



TABLE 6
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Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW10	5,789.30	6/3/2024	--	DRY	--	DRY
		9/23/2024	--	26.48	--	5762.82
MW11	5,787.99	10/22/2018	--	19.89	--	5,768.10
		3/29/2019	--	19.63	--	5,768.36
		6/28/2019	--	19.37	--	5,768.62
		9/17/2019	--	19.31	--	5,768.68
		12/17/2019	--	19.17	--	5,768.82
		3/12/2020	--	18.91	--	5,769.08
		6/25/2020	--	18.85	--	5,769.14
		9/23/2020	--	18.71	--	5,769.28
		3/31/2021	--	18.40	--	5,769.59
		6/14/2021	--	18.06	--	5,769.93
		9/24/2021	--	17.72	--	5,770.27
		12/2/2021	--	17.79	--	5,770.20
		3/1/2022	--	17.90	--	5,770.09
		6/7/2022	--	17.55	--	5,770.44
		9/29/2022	--	17.27	--	5,770.72
		12/8/2022	--	17.19	--	5,770.80
		3/2/2023	--	16.97	--	5,771.02
		6/16/2023	--	16.74	--	5,771.25
		9/14/2023	--	16.75	--	5,771.24
		12/14/2023	--	16.68	--	5,771.31
MW12	5,789.57	3/28/2024	--	17.08	--	5,770.91
		6/3/2024	--	17.05	--	5,770.94
		9/23/2024	--	16.70	--	5,771.29
		10/22/2018	--	21.77	--	5,767.80
		3/29/2019	--	21.88	--	5,767.69
		6/28/2019	--	21.67	--	5,767.90
		9/17/2019	--	21.49	--	5,768.08
		12/17/2019	--	21.54	--	5,768.03
		3/12/2020	--	21.31	--	5,768.26
		6/25/2020	--	21.21	--	5,768.36
		9/23/2020	--	21.02	--	5,768.55
		3/31/2021	--	20.93	--	5,768.64
		6/14/2021	--	20.61	--	5,768.96
		9/24/2021	--	20.17	--	5,769.40
		12/2/2021	--	20.17	--	5,769.40
		3/1/2022	--	20.30	--	5,769.27
		6/7/2022	--	20.02	--	5,769.55
		9/29/2022	--	19.68	--	5,769.89
		12/8/2022	--	19.57	--	5,770.00
		3/2/2023	--	19.32	--	5,770.25
		6/16/2023	--	19.11	--	5,770.46
		9/14/2023	--	19.04	--	5,770.53
		12/14/2023	--	19.01	--	5,770.56



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Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW12	5,789.57	3/28/2024	--	19.49	--	5,770.08
		6/3/2024	--	19.49	--	5,770.08
		9/23/2024	--	19.22	--	5,770.35
MW13	5,785.16	10/22/2018	--	DRY	--	DRY
		3/29/2019	--	DRY	--	DRY
		6/28/2019	--	DRY	--	DRY
		9/17/2019	--	DRY	--	DRY
		12/17/2019	--	DRY	--	DRY
		3/12/2020	--	DRY	--	DRY
		6/25/2020	--	DRY	--	DRY
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/2/2021	--	DRY	--	DRY
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	DRY	--	DRY
		9/29/2022	--	DRY	--	DRY
		12/8/2022	--	DRY	--	DRY
		3/2/2023	--	DRY	--	DRY
		6/16/2023	--	DRY	--	DRY
		9/14/2023	--	DRY	--	DRY
		12/14/2023	--	DRY	--	DRY
MW14	5,785.46	3/28/2024	--	DRY	--	DRY
		6/3/2024	--	DRY	--	DRY
		9/25/2024	--	DRY	--	DRY
		10/22/2018	--	22.87	--	5,762.59
		3/29/2019	20.26	20.47	0.21	5,765.16
		6/28/2019	19.15	19.16	0.01	5,766.31
		9/17/2019	18.65	18.69	0.04	5,766.80
		12/17/2019	18.61	18.74	0.13	5,766.82
		3/12/2020	--	18.81	--	5,766.65
		6/25/2020	--	18.18	--	5,767.28
		9/23/2020	--	17.92	--	5,767.54
		3/31/2021	--	17.92	--	5,767.54
		6/14/2021	Trace	17.78	Trace	5,767.68
		9/24/2021	--	17.52	--	5,767.94
		12/3/2021	--	17.79	--	5,767.67
		3/1/2022	--	17.18	--	5,768.28
		6/7/2022	--	16.84	--	5,768.62
		9/29/2022	--	16.37	--	5,769.09
		12/8/2022	--	16.17	--	5,769.29
		3/2/2023	Trace	15.91	Trace	5,769.55
		6/16/2023	Trace	15.63	Trace	5,769.83
		9/14/2023	--	15.65	--	5,769.81



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Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW14	5,785.46	12/14/2023	--	15.63	--	5,769.83
		3/28/2024	Trace	15.84	Trace	5,769.62
		6/3/2024	Trace	15.88	Trace	5,769.58
		9/25/2024	Trace	15.55	Trace	5,769.91
MW15	5,792.19	3/29/2019	--	DRY	--	DRY
		6/28/2019	--	35.95	--	5,756.24
		9/17/2019	--	33.22	--	5,758.97
		12/17/2019	--	31.61	--	5,760.58
		3/12/2020	--	31.42	--	5,760.77
		6/25/2020	--	30.41	--	5,761.78
		9/23/2020	--	27.42	--	5,764.77
		3/31/2021	--	27.8	--	5,764.39
		6/14/2021	--	29.18	--	5,763.01
		9/24/2021	--	26.69	--	5,765.50
		12/3/2021	--	26.82	--	5,765.37
		3/1/2022	--	26.57	--	5,765.62
		6/7/2022	--	26.49	--	5,765.70
		9/29/2022	--	25.95	--	5,766.24
		12/8/2022	--	26.21	--	5,765.98
		3/2/2023	--	25.95	--	5,766.24
		6/16/2023	--	25.08	--	5,767.11
		9/14/2023	--	25.97	--	5,766.22
		12/14/2023	--	--	--	--
		3/28/2024	--	21.03	--	5,771.16
		6/3/2024	--	15.03	--	5,777.16
		9/25/2024	--	20.37	--	5,771.82
MW16	5,786.54	3/29/2019	--	28.59	--	5,757.95
		6/28/2019	--	21.00	--	5,765.54
		9/17/2019	--	20.91	--	5,765.63
		12/17/2019	--	21.11	--	5,765.43
		3/12/2020	--	20.89	--	5,765.65
		6/25/2020	--	20.51	--	5,766.03
		9/23/2020	--	20.37	--	5,766.17
		3/31/2021	19.99	20.04	0.05	5,766.54
		6/14/2021	Trace	19.51	Trace	5,767.03
		9/24/2021	--	18.81	--	5,767.73
		12/2/2021	Trace	18.46	Trace	5,768.08
		3/1/2022	--	18.39	--	5,768.15
		6/7/2022	--	18.00	--	5,768.54
		9/29/2022	17.53	17.54	0.01	5,769.01
		12/8/2022	--	17.32	--	5,769.22
		3/2/2023	--	17.03	--	5,769.51
		6/16/2023	--	16.81	--	5,769.73
		9/14/2023	--	16.82	--	5,769.72
		12/15/2023	--	16.75	--	5,769.79



TABLE 6
GROUNDWATER ELEVATION
 Standard #1
 Hilcorp Energy Company
 San Juan County, New Mexico

Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW16	MW16	3/28/2024	--	16.91	--	5,769.63
		6/3/2024	--	17.04	--	5,769.50
		9/25/2024	--	17.17	--	5,769.37
MW17	5,785.25	3/29/2019	--	DRY	--	DRY
		6/28/2019	--	DRY	--	DRY
		9/17/2019	--	30.24	--	5,755.01
		12/17/2019	--	DRY	--	DRY
		3/12/2020	--	DRY	--	DRY
		6/25/2020	--	DRY	--	DRY
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/2/2021	--	30.24	--	5,755.01
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	30.21	--	5,755.04
		9/29/2022	--	30.22	--	5,755.03
		12/8/2022	--	28.68	--	5,756.57
		3/2/2023	--	25.58	--	5,759.67
		6/16/2023	--	22.13	--	5,763.12
		9/14/2023	--	20.78	--	5,764.47
		12/15/2023	--	21.68	--	5,763.57
		3/28/2024	--	22.38	--	5,762.87
MW18	5,789.34	6/3/2024	--	23.02	--	5,762.23
		9/25/2024	--	21.89	--	5,763.36
		3/29/2019	--	DRY	--	DRY
		6/28/2019	--	20.39	--	5,768.95
		9/17/2019	--	19.06	--	5,770.28
		12/17/2019	--	19.98	--	5,769.36
		3/12/2020	--	19.98	--	5,769.36
		6/25/2020	--	19.79	--	5,769.55
		9/23/2020	--	19.55	--	5,769.79
		3/31/2021	--	19.43	--	5,769.91
		6/14/2021	--	18.98	--	5,770.36
		9/24/2021	--	18.52	--	5,770.82
		12/2/2021	--	18.64	--	5,770.70
		3/1/2022	--	18.90	--	5,770.44
		6/7/2022	--	18.25	--	5,771.09
		9/29/2022	--	18.01	--	5,771.33
		12/8/2022	--	17.91	--	5,771.43
		3/2/2023	--	17.64	--	5,771.70
		6/16/2023	--	17.38	--	5,771.96
		9/14/2023	--	17.43	--	5,771.91
		12/14/2023	--	17.37	--	5,771.97
		3/27/2024	--	17.61	--	5,771.73



TABLE 6
GROUNDWATER ELEVATION
 Standard #1
 Hilcorp Energy Company
 San Juan County, New Mexico

Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW18	5,789.34	6/3/2024	--	17.57	--	5,771.77
		9/23/2024	--	17.24	--	5,772.10
MW19	5,786.48	3/29/2019	--	19.60	--	5,766.88
		6/28/2019	--	19.55	--	5,766.93
		9/17/2019	--	19.35	--	5,767.13
		12/17/2019	--	19.37	--	5,767.11
		3/12/2020	--	19.45	--	5,767.03
		6/25/2020	--	19.30	--	5,767.18
		9/23/2020	--	19.08	--	5,767.40
		3/31/2021	--	19.21	--	5,767.27
		6/14/2021	--	19.10	--	5,767.38
		9/24/2021	--	18.70	--	5,767.78
		12/2/2021	--	DRY	--	DRY
		3/1/2022	--	18.49	--	5,767.99
		6/7/2022	--	18.35	--	5,768.13
		9/29/2022	--	17.15	--	5,769.33
		12/8/2022	--	18.19	--	5,768.29
		3/2/2023	--	17.93	--	5,768.55
		6/16/2023	--	17.72	--	5,768.76
		9/14/2023	--	17.58	--	5,768.90
		12/15/2023	--	17.63	--	5,768.85
		3/28/2024	--	18.27	--	5,768.21
MW20	5,783.34	6/3/2024	--	18.38	--	5,768.10
		9/25/2024	--	18.20	--	5,768.28
		3/29/2019	--	29.61	--	5,753.73
		6/28/2019	--	30.00	--	5,753.34
		9/17/2019	--	30.21	--	5,753.13
		12/17/2019	--	30.15	--	5,753.19
		3/12/2020	--	30.30	--	5,753.04
		6/25/2020	--	DRY	--	DRY
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/2/2021	--	30.24	--	5,753.10
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	DRY	--	DRY
		9/29/2022	--	DRY	--	DRY
		12/8/2022	--	30.25	--	5,753.09
		3/2/2023	--	DRY	--	DRY
		6/16/2023	--	30.25	--	5,753.09
		9/14/2023	--	DRY	--	DRY
		12/15/2023	--	DRY	--	DRY
		3/27/2024	--	DRY	--	DRY
		6/3/2024	--	DRY	--	DRY



TABLE 6
GROUNDWATER ELEVATION
 Standard #1
 Hilcorp Energy Company
 San Juan County, New Mexico

Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW20		9/25/2024	--	DRY	--	DRY
MW21	5,800.30	3/29/2019	--	DRY	--	DRY
		6/28/2019	--	DRY	--	DRY
		9/17/2019	--	DRY	--	DRY
		12/17/2019	--	DRY	--	DRY
		3/12/2020	--	DRY	--	DRY
		6/25/2020	--	DRY	--	DRY
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/2/2021	--	DRY	--	DRY
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	DRY	--	DRY
		9/29/2022	--	DRY	--	DRY
		12/8/2022	--	DRY	--	DRY
		3/2/2023	--	DRY	--	DRY
		6/16/2023	--	DRY	--	DRY
		9/14/2023	--	DRY	--	DRY
		12/15/2023	--	DRY	--	DRY
		3/27/2024	--	DRY	--	DRY
		6/3/2024	--	DRY	--	DRY
		9/25/2024	--	DRY	--	DRY
MW22	5,786.25	3/29/2019	--	22.56	--	5,763.69
		6/28/2019	--	17.62	--	5,768.63
		9/17/2019	--	17.54	--	5,768.71
		12/17/2019	--	17.35	--	5,768.90
		3/12/2020	--	17.10	--	5,769.15
		6/25/2020	--	17.04	--	5,769.21
		9/23/2020	--	16.85	--	5,769.40
		3/31/2021	--	16.43	--	5,769.82
		6/14/2021	--	16.10	--	5,770.15
		9/24/2021	--	15.74	--	5,770.51
		12/2/2021	--	15.84	--	5,770.41
		3/1/2022	--	15.95	--	5,770.30
		6/7/2022	--	15.53	--	5,770.72
		9/29/2022	--	15.25	--	5,771.00
		12/8/2022	--	15.16	--	5,771.09
		3/2/2023	--	14.90	--	5,771.35
		6/16/2023	--	14.68	--	5,771.57
		9/14/2023	--	14.97	--	5,771.28
		12/14/2023	--	14.64	--	5,771.61
		3/28/2024	--	14.77	--	5,771.48
		6/3/2024	--	14.76	--	5,771.49
		9/23/2024	--	14.51	--	5,771.74



TABLE 6
GROUNDWATER ELEVATION
 Standard #1
 Hilcorp Energy Company
 San Juan County, New Mexico

Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW23	5,804.80	6/28/2019	--	45.99	--	5,758.81
		9/17/2019	--	40.23	--	5,764.57
		12/17/2019	--	39.16	--	5,765.64
		3/12/2020	--	38.71	--	5,766.09
		6/25/2020	--	38.92	--	5,765.88
		9/23/2020	--	38.83	--	5,765.97
		3/31/2021	--	37.97	--	5,766.83
		6/14/2021	--	37.90	--	5,766.90
		9/24/2021	--	37.44	--	5,767.36
		12/3/2021	--	37.32	--	5,767.48
		3/1/2022	--	37.38	--	5,767.42
		6/7/2022	--	36.99	--	5,767.81
		9/29/2022	--	36.61	--	5,768.19
		12/8/2022	--	36.49	--	5,768.31
		3/2/2023	--	36.11	--	5,768.69
		6/16/2023	--	35.70	--	5,769.10
		9/15/2023	--	35.58	--	5,769.22
		12/14/2023	--	35.48	--	5,769.32
		3/27/2024	--	35.25	--	5,769.55
		6/3/2024	--	35.26	--	5,769.54
		9/25/2024	--	35.18	--	5,769.62
MW24	5,782.50	6/28/2019	--	DRY	--	DRY
		9/17/2019	--	DRY	--	DRY
		12/17/2019	--	DRY	--	DRY
		3/12/2020	--	DRY	--	DRY
		6/25/2020	--	DRY	--	DRY
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/2/2021	--	33.08	--	5,749.42
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	DRY	--	DRY
		9/29/2022	--	33.09	--	5,749.41
		12/8/2022	--	DRY	--	DRY
		3/2/2023	--	33.07	--	5,749.43
		6/16/2023	--	DRY	--	DRY
		9/15/2023	--	DRY	--	DRY
		12/14/2023	--	DRY	--	DRY
		3/27/2024	--	DRY	--	DRY
		6/3/2024	--	DRY	--	DRY
		9/25/2024	--	DRY	--	DRY



TABLE 6
GROUNDWATER ELEVATION
 Standard #1
 Hilcorp Energy Company
 San Juan County, New Mexico

Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW25	5,775.65	6/28/2019	--	32.98	--	5,742.67
		9/17/2019	--	32.91	--	5,742.74
		12/17/2019	--	32.92	--	5,742.73
		3/12/2020	--	32.92	--	5,742.73
		6/25/2020	--	32.93	--	5,742.72
		9/23/2020	--	DRY	--	DRY
		3/31/2021	--	DRY	--	DRY
		6/14/2021	--	DRY	--	DRY
		9/24/2021	--	DRY	--	DRY
		12/1/2021	--	33.06	--	5,742.59
		3/1/2022	--	DRY	--	DRY
		6/7/2022	--	33.04	--	5,742.61
		9/29/2022	--	33.05	--	5,742.60
		12/8/2022	--	DRY	--	DRY
		3/2/2023	--	DRY	--	DRY
		6/16/2023	--	DRY	--	DRY
		9/15/2023	--	DRY	--	DRY
		12/14/2023	--	DRY	--	DRY
		3/27/2024	--	DRY	--	DRY
		3/27/2024	--	33.04	--	5,742.61
		9/25/2024	--	DRY	--	DRY
MW26	5,789.96	6/28/2019	--	19.71	--	5,770.25
		9/17/2019	--	19.64	--	5,770.32
		12/17/2019	--	19.41	--	5,770.55
		3/12/2020	--	19.29	--	5,770.67
		6/25/2020	--	19.29	--	5,770.67
		9/23/2020	--	19.28	--	5,770.68
		3/31/2021	--	18.64	--	5,771.32
		6/14/2021	--	18.30	--	5,771.66
		9/24/2021	--	18.32	--	5,771.64
		12/3/2021	--	18.55	--	5,771.41
		3/1/2022	--	18.50	--	5,771.46
		6/7/2022	--	17.86	--	5,772.10
		9/29/2022	--	17.81	--	5,772.15
		12/8/2022	--	17.65	--	5,772.31
		3/2/2023	--	17.30	--	5,772.66
		6/16/2023	--	17.04	--	5,772.92
		9/14/2023	--	17.20	--	5,772.76
		12/14/2023	--	17.12	--	5,772.84
		3/27/2024	--	16.98	--	5,772.98
		6/3/2024	--	16.88	--	5,773.08
		9/25/2024	--	16.78	--	5,773.18



TABLE 6 GROUNDWATER ELEVATION Standard #1 Hilcorp Energy Company San Juan County, New Mexico						
Monitoring Well	Top of Casing Elevation (feet)	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)

Notes:
AMSL: above mean sea level
BTOC: below top of casing
Trace: trace amounts of free product in well
--: not measured
A product density factor of 0.8 was used to account for the presence of free product



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW01	10/22/2018	No sample collected due to presence of PSH			
	3/29/2019	No sample collected due to presence of PSH			
	6/28/2019	No sample collected due to presence of PSH			
	9/17/2019	No sample collected due to presence of PSH			
	12/17/2019	No sample collected due to presence of PSH			
	3/12/2020	No sample collected due to presence of PSH			
	6/25/2020	No sample collected due to presence of PSH			
	9/23/2020	No sample collected due to presence of PSH			
	3/21/2021	No sample collected due to presence of PSH			
	6/14/2021	No sample collected due to presence of PSH			
	9/20/2021	27	39	1.3	15
	12/2/2021	No sample collected due to presence of PSH			
	3/1/2022	No sample collected due to presence of PSH			
	6/7/2022	No sample collected due to presence of PSH			
	9/29/2022	No sample collected due to presence of PSH			
	12/8/2022	No sample collected due to presence of PSH			
	3/2/2023	No sample collected due to presence of PSH			
	6/16/2023	No sample collected due to presence of PSH			
	9/15/2023	NS	NS	NS	NS
	12/14/2023	NS	NS	NS	NS
	3/27/2024	24	34	1.5	17
	6/4/2024	No sample collected due to presence of PSH			
	9/23/2024	No sample collected due to presence of PSH			
MW02	10/22/2018	14	7.1	1.2	12
	3/29/2019	No sample collected due to presence of PSH			
	6/28/2019	No sample collected due to presence of PSH			
	9/17/2019	No sample collected due to presence of PSH			
	12/17/2019	No sample collected due to presence of PSH			
	3/12/2020	17	8.2	1.8	15
	6/25/2020	19	18	2.3	21
	9/23/2020	17	16	2.8	25
	3/31/2021	16	12	2.0	20
	6/14/2021	No sample collected due to presence of PSH			
	9/20/2021	15	7.3	1.6	20
	12/3/2021	16	6.9	1.8	21
	3/1/2022	14	4.4	1.3	15
	6/7/2022	No sample collected due to presence of PSH			
	9/29/2022	16	2.6	1.6	16
	12/8/2022	16	2.5	1.9	18
	3/2/2023	No sample collected due to presence of PSH			
	6/16/2023	No sample collected due to presence of PSH			
	9/15/2023	NS	NS	NS	NS
	12/14/2023	NS	NS	NS	NS
	3/27/2024	14	3.6	0.33	6.8
	6/4/2024	No sample collected due to presence of PSH			
	9/23/2024	No sample collected due to presence of PSH			
MW03	10/22/2018	Insufficient Water Volumes to Collect Sample			
	3/29/2019	21	0.110	0.27	11
	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	12	0.25	0.22	6.9
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	15	<0.20	0.47	6.3
	6/25/2020	14	0.11	0.51	1.5
	9/23/2020	14	0.57	0.46	3.5
	3/31/2021	13	1.3	0.48	1.7
	6/14/2021	12	1.8	0.37	4.9
	9/23/2021	13	4.2	0.34	8.2
	12/3/2021	16	2.3	0.54	5.5
	3/1/2022	16	2.2	0.59	6.0
	6/7/2022	16	2.6	0.70	6.6
	9/29/2022	17	1.0	0.66	6.4
	12/8/2022	17	1.0	0.73	6.8
	3/2/2023	17	1.1	0.65	5.6
	6/16/2023	16	1.8	0.68	6.2
	9/15/2023	18	1.0	0.65	5.8
	12/14/2023	NS	NS	NS	NS



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW03	3/27/2024	9.2	5.5	<0.20	4.3
	6/4/2024	10	5.8	<0.50	4.4
	9/23/2024	No sample collected due to presence of PSH			
MW04	10/22/2018	Insufficient Water Volumes to Collect Sample			
	3/29/2019	Insufficient Water Volumes to Collect Sample			
	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	Insufficient Water Volumes to Collect Sample			
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	Insufficient Water Volumes to Collect Sample			
	6/25/2020	Insufficient Water Volumes to Collect Sample			
	9/23/2020	Insufficient Water Volumes to Collect Sample			
	3/31/2021	1.1	<0.002	0.095	0.018
	6/14/2021	1.7	0.0035	0.11	0.020
	9/20/2021	0.83	0.045	0.051	0.14
	12/3/2021	1.3	<0.010	0.099	<0.020
	3/1/2022	0.91	<0.020	0.066	<0.040
	6/7/2022	0.24	<0.0010	<0.0010	<0.0020
	9/29/2022	1.5	<0.020	0.033	<0.030
	12/8/2022	No sample collected due to presence of PSH			
	3/2/2023	0.32	<0.008	<0.008	<0.016
	6/16/2023	No sample collected due to presence of PSH			
	9/15/2023	No sample collected due to presence of PSH			
	12/14/2023	No sample collected due to presence of PSH			
	3/27/2024	No sample collected due to presence of PSH			
	6/4/2024	0.31	<0.010	<0.010	<0.015
	9/23/2024	No sample collected due to presence of PSH			
MW05	10/22/2018	Insufficient Water Volumes to Collect Sample			
	3/29/2019	10	0.88	0.45	2.9
	6/28/2019	5.9	0.16	0.20	1.4
	9/17/2019	5.0	0.77	0.11	3.1
	12/17/2019	5.4	0.14	0.15	2.6
	3/12/2020	4.4	0.13	0.18	1.0
	6/25/2020	5.0	0.17	0.087	0.70
	9/23/2020	3.9	1.1	0.26	4.2
	3/31/2021	2.5	6.0	0.73	15
	6/14/2021	4.4	1.8	0.55	18
	9/20/2021	3.5	4.0	0.80	20
	12/3/2021	3.6	3.5	0.72	19
	3/1/2022	2.9	0.81	0.62	13
	6/7/2022	No sample collected due to presence of PSH			
	9/29/2022	No sample collected due to presence of PSH			
	12/8/2022	No sample collected due to presence of PSH			
	3/2/2023	No sample collected due to presence of PSH			
	6/16/2023	No sample collected due to presence of PSH			
	9/15/2023	No sample collected due to presence of PSH			
	12/14/2023	No sample collected due to presence of PSH			
	3/27/2024	No sample collected due to presence of PSH			
	6/3/2024	No sample collected due to presence of PSH			
	9/23/2024	No sample collected due to presence of PSH			
MW06	10/22/2018	No sample collected due to presence of PSH			
	3/29/2019	No sample collected due to presence of PSH			
	6/28/2019	No sample collected due to presence of PSH			
	9/17/2019	No sample collected due to presence of PSH			
	12/17/2019	No sample collected due to presence of PSH			
	3/12/2020	19	25	1.3	14
	6/25/2020	20	31	1.5	17
	9/23/2020	16	24	1.5	18
	3/31/2021	16	21	1.7	21
	9/24/2021	No sample collected due to presence of PSH			
	9/20/2021	14	19	1.3	16
	12/3/2021	13	19	1.3	17
	3/1/2022	13	20	1.3	18
	6/7/2022	11	15	1.1	16
	9/29/2022	No sample collected due to presence of PSH			
	12/8/2022	No sample collected due to presence of PSH			
	3/2/2023	No sample collected due to presence of PSH			
	6/16/2023	No sample collected due to presence of PSH			



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW06	9/15/2023	No sample collected due to presence of PSH			
	12/14/2023	NS	NS	NS	NS
	3/27/2024	2.9	3.1	0.59	8.7
	6/3/2024	No sample collected due to presence of PSH			
	9/23/2024	No sample collected due to presence of PSH			
MW07	10/22/2018	Well Damaged, No Sample Collected			
	3/29/2019	Well Damaged, No Sample Collected			
	6/28/2019	Well Damaged, No Sample Collected			
	9/17/2019	Well Damaged, No Sample Collected			
	12/17/2019	Well Damaged, No Sample Collected			
	3/12/2020	Well Damaged, No Sample Collected			
	6/25/2020	Well Damaged, No Sample Collected			
	9/23/2020	Well Damaged, No Sample Collected			
	3/31/2021	Well Damaged, No Sample Collected			
	6/14/2021	Well Damaged, No Sample Collected			
	9/20/2021	Well Damaged, No Sample Collected			
	12/3/2021	Well Damaged, No Sample Collected			
	3/1/2022	Well Damaged, No Sample Collected			
	6/7/2022	Well Damaged, No Sample Collected			
	9/29/2022	Well Damaged, No Sample Collected			
	12/8/2022	Well Damaged, No Sample Collected			
	3/2/2023	Well Damaged, No Sample Collected			
	6/16/2023	Well Damaged, No Sample Collected			
	9/15/2023	Well Damaged, No Sample Collected			
	12/14/2023	Well Damaged, No Sample Collected			
	3/27/2024	Well Damaged, No Sample Collected			
	6/3/2027	Well Damaged, No Sample Collected			
	9/23/2024	Well Damaged, No Sample Collected			
MW08	10/22/2018	Insufficient Water Volumes to Collect Sample			
	3/29/2019	Insufficient Water Volumes to Collect Sample			
	6/28/2019	<0.0010	<0.0010	<0.0010	<0.0020
	9/17/2019	<0.0010	<0.0010	<0.0010	<0.0020
	3/12/2020	<0.0010	<0.0010	<0.0010	0.0017
	6/25/2020	<0.0010	<0.0010	<0.0010	<0.0015
	9/23/2020	<0.0010	<0.0010	<0.0010	<0.0015
	3/31/2021	<0.0010	<0.0010	<0.0010	<0.0015
	6/14/2021	<0.0010	<0.0010	<0.0010	<0.0015
	9/23/2021	<0.0010	<0.0010	<0.0010	<0.0020
	12/2/2021	<0.0010	<0.0010	<0.0010	<0.0020
	3/1/2022	<0.0010	<0.0010	<0.0010	<0.0020
	6/7/2022	<0.0010	<0.0010	<0.0010	<0.0020
	9/29/2022	<0.0010	<0.0010	<0.0010	<0.0015
	12/8/2022	<0.0010	<0.0010	<0.0010	<0.0015
	3/2/2023	<0.0010	<0.0010	<0.0010	<0.0020
	6/16/2023	<0.0010	<0.0010	<0.0010	<0.0020
	9/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	12/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	3/27/2024	<0.0010	<0.0010	<0.0010	<0.0015
	6/3/2024	<0.0010	<0.0010	<0.0010	<0.0015
	9/23/2024	<0.0010	<0.0010	<0.0010	<0.0015
MW09	10/22/2018	Insufficient Water Volumes to Collect Sample			
	3/29/2019	Insufficient Water Volumes to Collect Sample			
	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	Insufficient Water Volumes to Collect Sample			
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	Insufficient Water Volumes to Collect Sample			
	6/25/2020	Insufficient Water Volumes to Collect Sample			
	9/23/2020	Insufficient Water Volumes to Collect Sample			
	3/31/2021	Insufficient Water Volumes to Collect Sample			
	6/14/2021	Insufficient Water Volumes to Collect Sample			
	9/20/2021	Insufficient Water Volumes to Collect Sample			
	12/3/2021	Insufficient Water Volumes to Collect Sample			
	3/1/2022	Insufficient Water Volumes to Collect Sample			
	6/7/2022	Insufficient Water Volumes to Collect Sample			
	9/29/2022	Insufficient Water Volumes to Collect Sample			
	12/8/2022	Insufficient Water Volumes to Collect Sample			
	3/2/2023	Insufficient Water Volumes to Collect Sample			



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW09	6/16/2023	0.021	0.027	0.0019	0.015
	9/15/2023	1.1	0.0036	0.078	1.4
	12/15/2023	1.1	<0.010	0.096	0.29
	3/28/2024	1.0	<0.010	0.087	<0.015
	6/3/2024	Insufficient Water Volumes to Collect Sample			
	9/23/2024	Insufficient Water Volumes to Collect Sample			
MW10	10/22/2018	22	21	1.6	13
	3/29/2019	No sample collected due to presence of PSH			
	6/28/2019	No sample collected due to presence of PSH			
	9/17/2019	No sample collected due to presence of PSH			
	12/17/2019	No sample collected due to presence of PSH			
	3/12/2020	No sample collected due to presence of PSH			
	6/25/2020	No sample collected due to presence of PSH			
	9/23/2020	No sample collected due to presence of PSH			
	3/31/2021	No sample collected due to presence of PSH			
	6/14/2021	No sample collected due to presence of PSH			
	9/23/2021	19	4.8	1.4	15
	12/3/2021	21	5.8	1.4	14
	3/1/2022	20	5.6	1.4	13
	6/7/2022	No sample collected due to presence of PSH			
	9/29/2022	No sample collected due to presence of PSH			
	12/8/2022	No sample collected due to presence of PSH			
	3/2/2023	No sample collected due to presence of PSH			
	6/16/2023	No sample collected due to presence of PSH			
	9/15/2023	No sample collected due to presence of PSH			
	12/14/2023	NS	NS	NS	NS
	3/27/2024	13	<0.5	1.4	7.8
	6/3/2024	Insufficient Water Volumes to Collect Sample			
	9/23/2024	No sample collected due to presence of PSH			
MW11	10/22/2018	<0.0010	<0.0010	<0.0010	<0.0015
	3/29/2019	0.0036	<0.0010	<0.0010	<0.0015
	6/28/2019	<0.0010	<0.0010	<0.0010	<0.0015
	9/17/2019	<0.0010	<0.0010	<0.0010	<0.002
	12/17/2019	NS	NS	NS	NS
	3/12/2020	0.001	0.0011	<0.0010	0.0051
	6/25/2020	<0.0010	<0.0010	<0.0010	<0.0015
	9/23/2020	<0.0010	<0.0010	<0.0010	<0.0015
	3/31/2021	<0.0010	<0.0010	<0.0010	<0.0015
	6/14/2021	<0.0010	<0.0010	<0.0010	<0.0015
	9/23/2021	<0.0010	<0.0010	<0.0010	<0.002
	12/2/2021	<0.0010	<0.0010	<0.0010	<0.002
	3/1/2022	<0.0010	<0.0010	<0.0010	<0.002
	6/7/2022	<0.0010	<0.0010	<0.0010	<0.002
	9/29/2022	<0.0010	<0.0010	<0.0010	<0.0015
	12/8/2022	<0.0010	<0.0010	<0.0010	<0.0015
	3/2/2023	<0.0010	<0.0010	<0.0010	<0.0020
	6/16/2023	<0.0010	<0.0010	<0.0010	<0.0020
	9/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	12/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	3/28/2024	<0.0010	<0.0010	<0.0010	<0.0015
	6/3/2024	<0.0010	<0.0010	<0.0010	<0.0015
	9/23/2024	<0.0010	<0.0010	<0.0010	<0.0015
MW12	10/22/2018	2.4	3.8	1.1	5.0
	3/29/2019	0.87	0.018	1.2	1.5
	6/28/2019	0.81	0.055	1.0	0.50
	9/17/2019	0.92	0.12	1.1	0.41
	12/17/2019	0.94	0.034	0.46	0.24
	3/12/2020	1.6	0.360	0.48	0.55
	6/25/2020	0.71	0.220	<0.02	0.34
	9/23/2020	0.89	0.087	0.22	0.12
	3/31/2021	0.69	0.051	0.14	0.054
	6/14/2021	0.37	0.0052	0.072	0.012
	12/2/2021	NS	NS	NS	NS
	12/2/2021	0.37	<0.0050	0.110	<0.010
	3/1/2022	0.24	<0.0020	0.031	<0.0040
	6/7/2022	0.11	<0.0010	0.016	0.0030
	9/29/2022	0.046	<0.0050	0.014	<0.0075



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW12	12/8/2022	0.041	<0.020	<0.020	<0.030
	3/2/2023	0.043	0.0010	0.0036	0.0032
	6/16/2023	0.052	<0.0010	0.0057	0.0029
	9/14/2023	0.048	<0.0010	0.0056	<0.0020
	12/14/2023	0.0053	<0.0010	0.0011	<0.0020
	3/28/2024	0.036	<0.0010	<0.0010	<0.0015
	6/3/2024	0.0093	<0.0020	<0.0020	<0.0030
	9/23/2024	0.015	<0.0010	<0.0010	<0.0015
MW14	10/22/2018	13	26	1.1	10
	3/29/2019	No sample collected due to presence of PSH			
	6/28/2019	No sample collected due to presence of PSH			
	9/17/2019	No sample collected due to presence of PSH			
	12/17/2019	NS	NS	NS	NS
	3/12/2020	13	13	1.3	14
	6/25/2020	11	17	1.0	15
	9/23/2020	8.2	14	0.80	16
	3/31/2021	9.4	17	1.5	18
	6/14/2021	No sample collected due to presence of PSH			
	9/24/2021	7.1	9.2	0.80	14
	12/3/2021	6.5	7.6	1.2	15
	3/1/2022	5.3	5.7	1.2	14
	6/7/2022	No sample collected due to presence of PSH			
	9/29/2022	4.3	1.3	1.1	6.3
	12/8/2022	3.8	1.8	1.6	9.5
	3/2/2023	No sample collected due to presence of PSH			
	6/16/2023	No sample collected due to presence of PSH			
	9/15/2023	No sample collected due to presence of PSH			
	12/14/2023	No sample collected due to presence of PSH			
	3/28/2024	No sample collected due to presence of PSH			
	6/3/2024	No sample collected due to presence of PSH			
	9/23/2024	No sample collected due to presence of PSH			
MW15	3/29/2019	Insufficient Water Volumes to Collect Sample			
	6/28/2019	24	28	1.1	10
	9/17/2019	24	28	0.87	9.4
	12/17/2019	23	29	0.64	10
	3/12/2020	23	4.5	0.66	9.4
	6/25/2020	28	1.0	0.47	8.6
	9/23/2020	21	1.2	0.61	8.6
	3/31/2021	25	0.6	0.69	8.5
	6/14/2021	26	0.42	0.60	8.9
	9/23/2021	22	0.82	0.57	6.6
	12/3/2021	24	1.0	0.56	4.1
	3/1/2022	23	3.4	0.65	4.4
	6/7/2022	22	3.9	0.50	2.9
	9/29/2022	24	7.5	0.64	4.6
	12/8/2022	25	4.9	0.54	4.8
	3/2/2023	21	6.0	0.61	4.6
	6/16/2023	21	7.6	0.47	3.5
	9/14/2023	29	10	0.59	4.3
	12/14/2023	NS	NS	NS	NS
	3/27/2024	14	1.0	<0.500	1.8
	6/4/2024	9.8	1.9	0.140	1.5
	9/25/2024	20	6.5	<0.500	2.7
MW16	3/29/2019	7.7	14	0.94	8.6
	6/28/2019	3.4	0.62	0.080	2.1
	9/17/2019	3.3	1.6	0.037	4.4
	12/17/2019	2.3	0.23	0.039	1.8
	3/12/2020	2.3	0.83	<0.050	3.8
	6/25/2020	2.1	0.34	0.051	3.3
	9/23/2020	1.4	0.23	0.075	3.6
	3/31/2021	No sample collected due to presence of PSH			
	6/14/2021	No sample collected due to presence of PSH			
	9/23/2021	0.32	0.62	0.71	17
	12/3/2021	No sample collected due to presence of PSH			
	3/1/2022	0.56	<0.020	0.43	6.4
	6/7/2022	0.29	<0.010	0.54	6.5
	9/29/2022	No sample collected due to presence of PSH			



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW16	12/8/2022	0.15	<0.050	0.38	2.1
	3/2/2023	0.11	<0.020	0.32	1.8
	6/16/2023	0.10	<0.050	0.34	1.1
	9/14/2023	0.13	<0.050	0.41	1.2
	12/15/2023	0.089	<0.020	0.38	0.49
	3/28/2024	0.077	<0.020	0.34	0.31
	6/3/2024	0.068	<0.010	0.27	0.27
	9/25/2024	0.13	<0.020	0.28	0.085
MW17	3/29/2019	Insufficient Water Volumes to Collect Sample			
	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	Insufficient Water Volumes to Collect Sample			
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	Insufficient Water Volumes to Collect Sample			
	6/25/2020	Insufficient Water Volumes to Collect Sample			
	9/23/2020	Insufficient Water Volumes to Collect Sample			
	3/31/2021	Insufficient Water Volumes to Collect Sample			
	6/14/2021	Insufficient Water Volumes to Collect Sample			
	9/23/2021	Insufficient Water Volumes to Collect Sample			
	12/3/2021	Insufficient Water Volumes to Collect Sample			
	3/1/2022	Insufficient Water Volumes to Collect Sample			
	6/7/2022	Insufficient Water Volumes to Collect Sample			
	9/29/2022	Insufficient Water Volumes to Collect Sample			
	12/8/2022	Insufficient Water Volumes to Collect Sample			
	3/2/2023	<0.002	<0.002	<0.002	<0.004
	6/16/2023	<0.0010	<0.0010	<0.0010	<0.0020
	9/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	12/15/2023	<0.0010	<0.0010	<0.0010	<0.0020
	3/27/2024	<0.0010	<0.0010	<0.0010	<0.0015
	6/3/2024	<0.0010	<0.0010	<0.0010	<0.0015
	9/25/2024	<0.0010	<0.0010	<0.0010	<0.0015
MW18	3/29/2019	No sample collected due to presence of PSH			
	6/28/2019	15	18	0.77	9.4
	9/17/2019	16	23	0.87	9.8
	12/17/2019	17	19	0.78	10
	3/12/2020	1.2	0.36	0.059	0.72
	6/25/2020	13	<0.2	0.56	6.0
	9/23/2020	8.4	<0.05	0.32	4.20
	3/31/2021	11.0	0.011	0.31	1.70
	6/14/2021	8.5	<0.1	0.28	0.62
	9/24/2021	5.3	<0.050	0.37	<0.100
	12/2/2021	9.9	<0.0020	0.61	<0.0040
	3/1/2022	8.0	<0.008	0.45	<0.016
	6/7/2022	6.6	<0.010	0.38	<0.020
	9/29/2022	6.4	<0.020	0.35	<0.030
	12/8/2022	6.7	<0.050	0.36	<0.075
	3/2/2023	4.2	<0.020	0.19	<0.040
	6/16/2023	1.5	<0.020	0.052	<0.040
	9/14/2023	5.9	<0.050	0.28	<0.100
	12/14/2023	5.5	<0.020	0.33	<0.040
	3/27/2024	0.067	<0.020	0.15	<0.030
	6/3/2024	1.4	<0.010	0.27	<0.015
	9/25/2024	0.084	<0.020	<0.020	<0.030
MW19	3/29/2019	14	10	0.93	6.2
	6/28/2019	13	0.230	0.90	4.9
	9/17/2019	17	0.44	1.1	5.8
	12/17/2019	11	0.88	0.76	3.4
	3/12/2020	10	1.60	0.76	2.4
	6/25/2020	16	5.40	0.95	3.4
	9/23/2020	12	4.10	0.73	2.8
	3/31/2021	16	8.5	1.1	4.7
	6/14/2021	15	10	1.0	5.1
	9/23/2021	14	9.9	1.1	4.8
	12/2/2021	15	10	1.1	5.2
	3/1/2022	13	9.6	1.1	5.2
	6/7/2022	12	10	1.1	5.4
	9/29/2022	13	12	1.1	6.2
	12/8/2022	12	14	1.3	7.8



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW19	3/2/2023	10	12	1.0	6.1
	6/16/2023	10	14	1.2	7.2
	9/14/2023	9.7	15	1.2	8.2
	12/14/2023	7.7	14	1.3	8.1
	3/28/2024	6.7	17	1.1	9.2
	6/3/2024	5.8 P2	17 P2	0.4 P2	8.8 P2
	9/25/2024	6.5	13	1.1	8.7
MW20	3/29/2019	Insufficient Water Volumes to Collect Sample			
	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	Insufficient Water Volumes to Collect Sample			
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	Insufficient Water Volumes to Collect Sample			
	6/25/2020	Insufficient Water Volumes to Collect Sample			
	9/23/2020	Insufficient Water Volumes to Collect Sample			
	3/31/2021	Insufficient Water Volumes to Collect Sample			
	6/14/2021	Insufficient Water Volumes to Collect Sample			
	9/23/2021	Insufficient Water Volumes to Collect Sample			
	12/3/2021	Insufficient Water Volumes to Collect Sample			
	3/1/2022	Insufficient Water Volumes to Collect Sample			
	6/7/2022	Insufficient Water Volumes to Collect Sample			
	9/29/2022	Insufficient Water Volumes to Collect Sample			
	12/8/2022	Insufficient Water Volumes to Collect Sample			
	3/2/2023	Insufficient Water Volumes to Collect Sample			
	6/16/2023	Insufficient Water Volumes to Collect Sample			
	9/14/2023	Insufficient Water Volumes to Collect Sample			
	12/14/2023	Insufficient Water Volumes to Collect Sample			
	3/27/2024	Insufficient Water Volumes to Collect Sample			
	6/3/2024	Insufficient Water Volumes to Collect Sample			
	9/25/2024	Insufficient Water Volumes to Collect Sample			
MW21	3/29/2019	Insufficient Water Volumes to Collect Sample			
	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	Insufficient Water Volumes to Collect Sample			
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	Insufficient Water Volumes to Collect Sample			
	6/25/2020	Insufficient Water Volumes to Collect Sample			
	9/23/2020	Insufficient Water Volumes to Collect Sample			
	3/31/2021	Insufficient Water Volumes to Collect Sample			
	6/14/2021	Insufficient Water Volumes to Collect Sample			
	9/23/2021	Insufficient Water Volumes to Collect Sample			
	12/3/2021	Insufficient Water Volumes to Collect Sample			
	3/1/2022	Insufficient Water Volumes to Collect Sample			
	6/7/2022	Insufficient Water Volumes to Collect Sample			
	9/29/2022	Insufficient Water Volumes to Collect Sample			
	12/8/2022	Insufficient Water Volumes to Collect Sample			
	3/2/2023	Insufficient Water Volumes to Collect Sample			
	6/16/2023	Insufficient Water Volumes to Collect Sample			
	9/14/2023	Insufficient Water Volumes to Collect Sample			
	12/14/2023	Insufficient Water Volumes to Collect Sample			
	3/27/2024	Insufficient Water Volumes to Collect Sample			
	6/3/2024	Insufficient Water Volumes to Collect Sample			
	9/25/2024	Insufficient Water Volumes to Collect Sample			
MW22	3/29/2019	0.001	0.002	<0.001	0.002
	6/28/2019	<0.001	<0.001	<0.001	<0.002
	9/17/2019	<0.001	<0.001	<0.001	<0.002
	12/17/2019	NS	NS	NS	NS
	3/12/2020	0.0011	0.0012	<0.001	0.0067
	6/25/2020	<0.001	<0.001	<0.001	0.0032
	9/23/2020	<0.001	<0.001	<0.001	<0.0015
	3/31/2021	<0.001	<0.001	<0.001	<0.0015
	6/14/2021	<0.001	<0.001	<0.001	<0.0015
	9/23/2021	<0.001	<0.001	<0.001	<0.002
	12/2/2021	<0.001	<0.001	<0.001	<0.002
	3/1/2022	<0.001	<0.001	<0.001	<0.002
	6/7/2022	<0.001	<0.001	<0.001	<0.002
	9/29/2022	<0.001	<0.001	<0.001	<0.0015
	12/8/2022	<0.002	<0.002	<0.002	<0.003
	3/2/2023	<0.002	<0.002	<0.002	<0.004



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW22	6/16/2023	<0.0020	<0.0020	<0.0020	<0.0040
	9/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	12/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	3/28/2024	<0.0010	<0.0010	<0.0010	<0.0015
	6/3/2024	<0.0010	<0.0010	<0.0010	<0.0015
	9/23/2024	<0.0010	<0.0010	<0.0010	<0.0015
MW23	6/18/2019	<0.001	<0.001	<0.001	<0.002
	9/17/2019	<0.001	<0.001	<0.001	<0.002
	12/17/2019	NS	NS	NS	NS
	3/12/2020	<0.001	<0.001	<0.001	<0.0015
	6/25/2020	<0.001	<0.001	<0.001	<0.0015
	9/23/2020	<0.001	<0.001	<0.001	<0.0015
	3/31/2021	<0.001	<0.001	<0.001	<0.0015
	6/14/2021	<0.001	<0.001	<0.001	<0.0015
	9/23/2021	Insufficient Water Volumes to Collect Sample			
	12/3/2021	<0.001	<0.001	<0.001	<0.002
	3/1/2022	<0.001	<0.001	<0.001	<0.002
	6/7/2022	<0.001	<0.001	<0.001	<0.002
	9/29/2022	<0.001	<0.001	<0.001	<0.0015
	12/8/2022	<0.002	<0.002	<0.002	<0.003
	3/2/2023	<0.002	<0.002	<0.002	<0.004
	6/16/2023	<0.0020	<0.0020	<0.0020	<0.0040
	9/15/2023	<0.001	<0.001	<0.001	<0.002
	12/14/2023	<0.001	<0.001	<0.001	<0.002
	3/27/2024	<0.001	<0.001	<0.001	<0.0015
	6/3/2024	<0.001	<0.001	<0.001	<0.0015
	9/25/2024	<0.0010	<0.0010	<0.0010	<0.0015
MW24	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	Insufficient Water Volumes to Collect Sample			
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	Insufficient Water Volumes to Collect Sample			
	6/25/2020	Insufficient Water Volumes to Collect Sample			
	9/23/2020	Insufficient Water Volumes to Collect Sample			
	3/31/2021	Insufficient Water Volumes to Collect Sample			
	6/14/2021	Insufficient Water Volumes to Collect Sample			
	9/23/2021	Insufficient Water Volumes to Collect Sample			
	12/3/2021	Insufficient Water Volumes to Collect Sample			
	3/1/2022	Insufficient Water Volumes to Collect Sample			
	6/7/2022	Insufficient Water Volumes to Collect Sample			
	9/29/2022	Insufficient Water Volumes to Collect Sample			
	12/8/2022	Insufficient Water Volumes to Collect Sample			
	3/2/2023	Insufficient Water Volumes to Collect Sample			
	6/16/2023	Insufficient Water Volumes to Collect Sample			
	9/14/2023	Insufficient Water Volumes to Collect Sample			
	12/14/2023	Insufficient Water Volumes to Collect Sample			
MW25	3/27/2024	Insufficient Water Volumes to Collect Sample			
	6/3/2024	Insufficient Water Volumes to Collect Sample			
	9/25/2024	Insufficient Water Volumes to Collect Sample			
	6/28/2019	Insufficient Water Volumes to Collect Sample			
	9/17/2019	Insufficient Water Volumes to Collect Sample			
	12/17/2019	Insufficient Water Volumes to Collect Sample			
	3/12/2020	Insufficient Water Volumes to Collect Sample			
	6/25/2020	Insufficient Water Volumes to Collect Sample			
	9/23/2020	Insufficient Water Volumes to Collect Sample			
	3/31/2021	Insufficient Water Volumes to Collect Sample			
	6/14/2021	Insufficient Water Volumes to Collect Sample			
	9/23/2021	Insufficient Water Volumes to Collect Sample			
	12/3/2021	Insufficient Water Volumes to Collect Sample			
	3/1/2022	Insufficient Water Volumes to Collect Sample			
	6/7/2022	Insufficient Water Volumes to Collect Sample			
	9/29/2022	Insufficient Water Volumes to Collect Sample			
	12/8/2022	Insufficient Water Volumes to Collect Sample			
	3/2/2023	Insufficient Water Volumes to Collect Sample			
	6/16/2023	Insufficient Water Volumes to Collect Sample			
	9/14/2023	Insufficient Water Volumes to Collect Sample			
	12/14/2023	Insufficient Water Volumes to Collect Sample			
	3/27/2024	Insufficient Water Volumes to Collect Sample			



TABLE 7 GROUNDWATER ANALYTICAL RESULTS Standard #1 Hilcorp Energy Company San Juan County, New Mexico					
Monitoring Well	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard		0.005	1.0	0.7	0.62
MW25	6/3/2024	Insufficient Water Volumes to Collect Sample			
	9/25/2024	Insufficient Water Volumes to Collect Sample			
MW26	6/18/2019	0.0052	<0.001	<0.001	<0.002
	9/17/2019	<0.001	<0.001	<0.001	<0.002
	12/17/2019	<0.001	<0.001	<0.001	<0.002
	3/12/2020	<0.001	<0.001	<0.001	<0.0015
	6/25/2020	<0.001	<0.001	<0.001	<0.0015
	9/23/2020	<0.001	<0.001	<0.001	<0.0015
	3/31/2021	<0.001	<0.001	<0.001	<0.0015
	6/14/2021	<0.001	<0.001	<0.001	<0.0015
	9/24/2021	<0.001	<0.001	<0.001	<0.002
	12/3/2021	<0.001	<0.001	<0.001	<0.002
	3/1/2022	<0.001	<0.001	<0.001	<0.002
	6/7/2022	<0.001	<0.001	<0.001	<0.002
	9/29/2022	<0.001	<0.001	<0.001	<0.0015
	12/8/2022	<0.001	<0.001	<0.001	<0.0015
	3/2/2023	<0.001	<0.001	<0.001	<0.002
	6/16/2023	<0.0010	<0.0010	<0.0010	<0.0020
	9/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	12/14/2023	<0.0010	<0.0010	<0.0010	<0.0020
	3/27/2024	<0.0010	<0.0010	<0.0010	<0.0015
	6/3/2024	<0.0010	<0.0010	<0.0010	<0.0015
	9/25/2024	<0.0010	<0.0010	<0.0010	<0.0015

Notes:

mg/L: milligrams per liter

NMWQCC: New Mexico Water Quality Control Commission

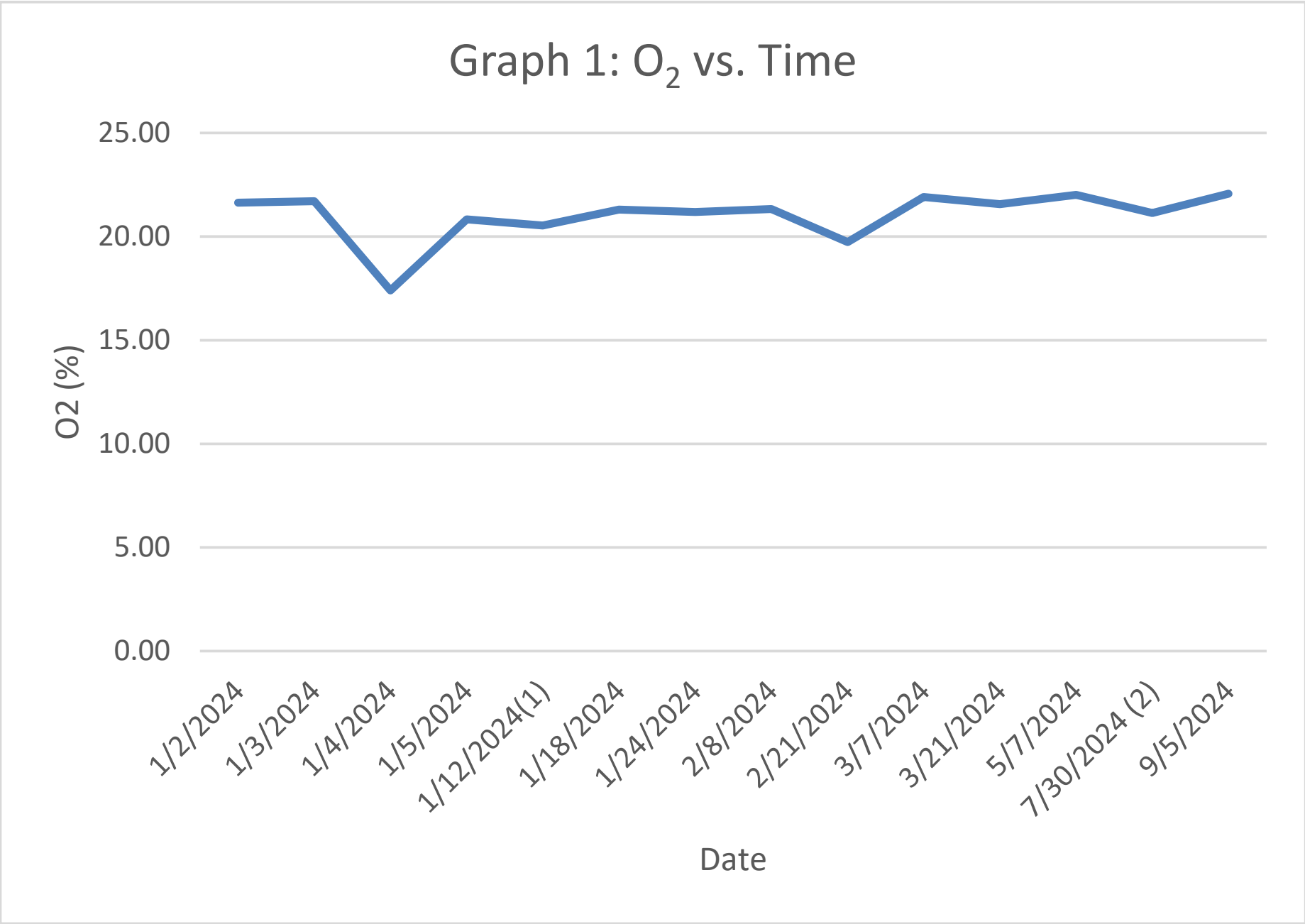
NS: not sampled

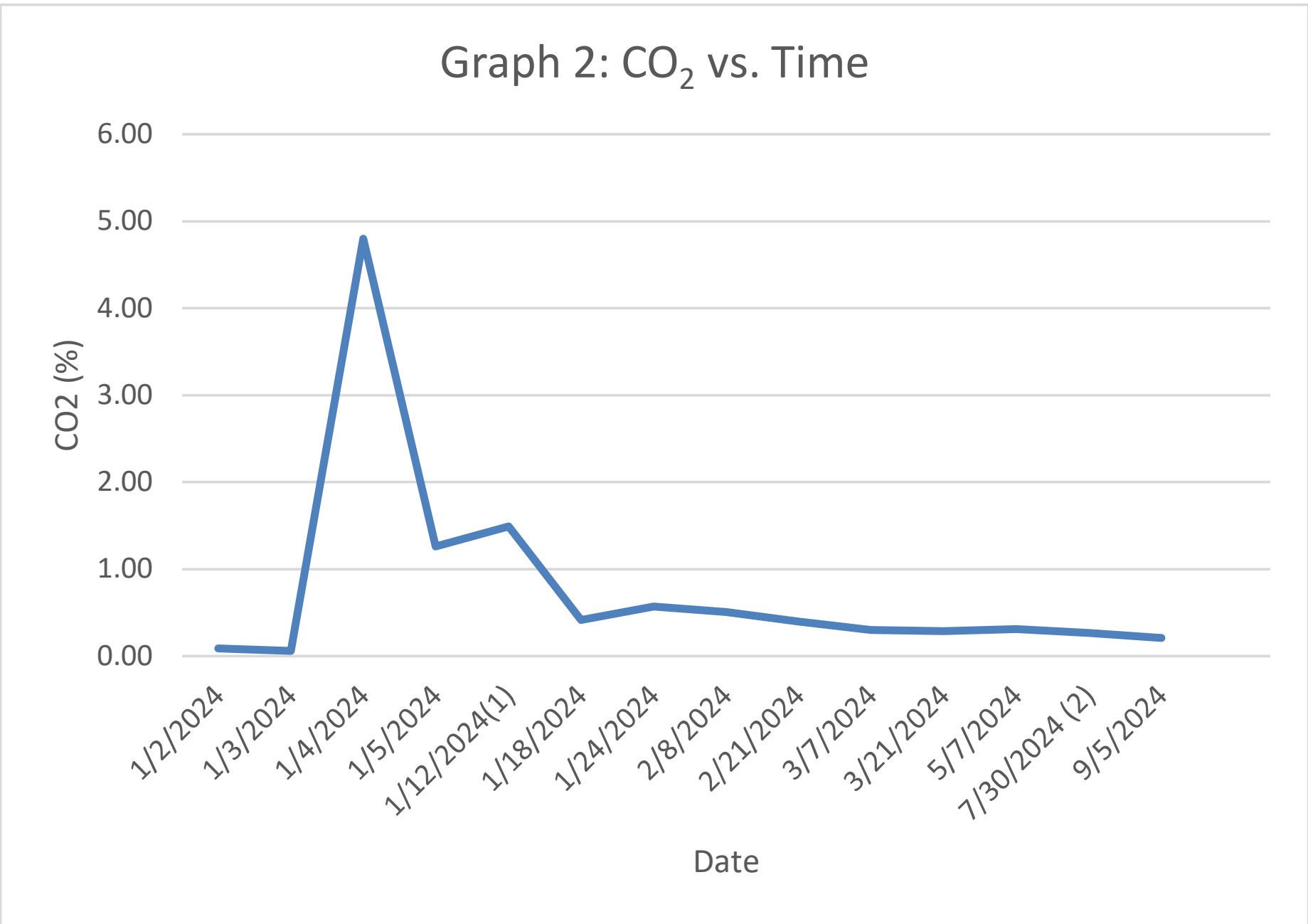
P2: sample received with pH > 2

PSH: phase separated hydrocarbon

<: 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







APPENDIX A

O&M Field Notes

STANDARD 1A DPE SYSTEM
O&M FORM

DATE: 7-17
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

DPE ALARMS: KO TANK HIGH LEVEL

NOTES

DPE SYSTEM	READING	TIME
Blower Hours (photo)	4645.1	1133
Transfer Pump Hours (photo)	91.6	
Influent Vacuum Pre-KO (InHg)	10	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	11.5	
Post-Filter Vacuum (InHg)	12.5	
Differential Pressure (IWC)	3.25	
Exhaust Temperature (°F)	205	
Exhaust PID (ppm)	148.3	
Transfer Pump Pressure (PSI)	5.5	
Transfer Pump Totalizer (Gal) (photo)	42352.1	

SVE SYSTEM SAMPLING

SAMPLE ID:	SAMPLE TIME: <u>ppm</u>		
PID (ppm)	<u>102.9</u>	OXYGEN (%) <u>20.8</u>	CARBON DIOXIDE (%) <u>12.00</u>
Analytes:	Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)		
OPERATING WELLS			

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%) ppm
MW01	121.5	276.1	19.7	2480
MW02	102.5	117.7	20.9	1500
MW03	128.7	434.1	19.6	3180
MW06	114.3	53.8	20.7	980
MW10	68.4	66.1	20.9	1140
MW15	128.8	10.3	20.9	20

CH4	H2S	CO
LEL	ppm	ppm
0	0.5	0
0	0.5	0
0	2.0	0
0	11.0	0
0	0	0
0	0	0

MANIFOLD MEASUREMENTS

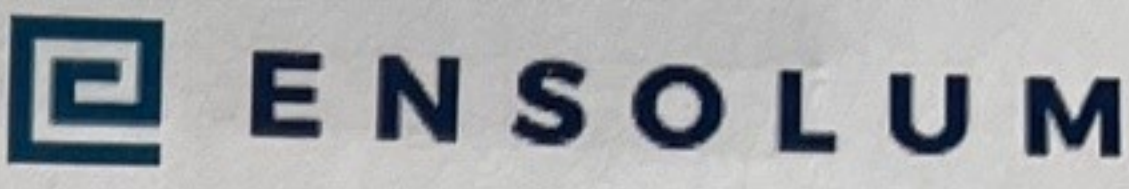
WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	7.75	Y	-0.37
MW02	10.25	Y	0.13
MW03	9.25	N	0.54
MW06	8.0	N	-0.63
MW10	10.25	Y	-0.46
MW15	10.25	Y	0.02

COMMENTS/MAINTENANCE ISSUES

• Cleaned site tube
• MW03, 06 site tube opaque

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0



STANDARD 1A DPE SYSTEM
O&M FORM

DATE: 7-29
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

DPE ALARMS: KO TANK HIGH LEVEL

DPE SYSTEM	READING	TIME
Blower Hours (photo)	4937.9	1629
Transfer Pump Hours (photo)	95.4	
Influent Vacuum Pre-KO (InHg)	*	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	14.25	
Post-Filter Vacuum (InHg)	12.75	
Differential Pressure (IWC)	3.0	
Exhaust Temperature (°F)	215	
Exhaust PID (ppm)	190.3	
Transfer Pump Pressure (PSI)	5.25	
Transfer Pump Totalizer (Gal) (photo)	97042.9	

NOTES
* Gauge reading 0

SVE SYSTEM SAMPLING

SAMPLE ID: <u>SVE-1</u>	SAMPLE TIME: <u>1620</u>
PID (ppm) <u>92.3</u>	OXYGEN (%) <u>20.9</u>
ANALYTES: <u>Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)</u>	CARBON DIOXIDE (%) <u>920</u> ppm
OPERATING WELLS	

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (% ppm)
MW01	122.5	285.7	20.2	2260
MW02	103.9	87.7	20.9	1020
MW03	126.6	397.6	20.2	2560
MW06	118.3	50.5	20.4	1000
MW10	77.1	60.9	20.9	1020
MW15	136.8	15.6	20.9	40

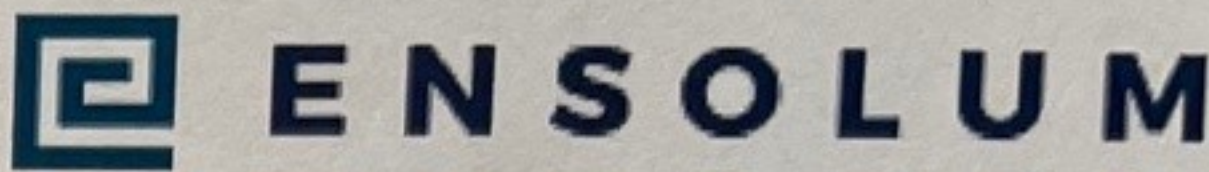
CH ₄	+1/2 S	CO
LEL	ppm	ppm
0	0.5	0
0	0	0
0	0.5	0
0	9.0	0
0	0	0
0	0	0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	8.0	N	2.07
MW02	10.25	Y	-0.46
MW03	9.25	N	0.85
MW06	8.0	N	0.01
MW10	10.25	N	-4.73
MW15	10.0	N	0.09

INFLUENCE	VACUUM (IWC)
WELL ID	
MW04	0
MW07	0

COMMENTS/MAINTENANCE ISSUES



STANDARD 1A DPE SYSTEM
O&M FORM

DATE: 8-12
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

DPE ALARMS: KO TANK HIGH LEVEL

DPE SYSTEM	READING	TIME
Blower Hours (photo)	5272.1	1438
Transfer Pump Hours (photo)	99.3	
Influent Vacuum Pre-KO (InHg)	0	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	14.75	
Post-Filter Vacuum (InHg)	13.25	
Differential Pressure (IWC)	2.75	
Exhaust Temperature (°F)	217.5	
Exhaust PID (ppm)	119.4	
Transfer Pump Pressure (PSI)	5.5	
Transfer Pump Totalizer (Gal) (photo)	101851.3	

NOTES

*gauge not functional

SVE SYSTEM SAMPLING

SAMPLE ID: _____ SAMPLE TIME: _____
PID (ppm) 57.2 OXYGEN (%) 20.4 CARBON DIOXIDE (%) 980
Analytes: Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)

OPERATING WELLS

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%) ppm	CH ₄ LEL	H ₂ S ppm	CO ppm
MW01	122.3	274.3	20.2	2300	0	0.5	0
MW02	103.7	110.1	20.9	1260	0	0	0
MW03	128.3	412.7	20.1	2780	0	0.5	0
MW06	117.8	55.5	20.6	1020	0	9.0	0
MW10	79.2	61.3	20.9	1080	0	0	0
MW15	131.8	19.1	20.9	20	0	0	0

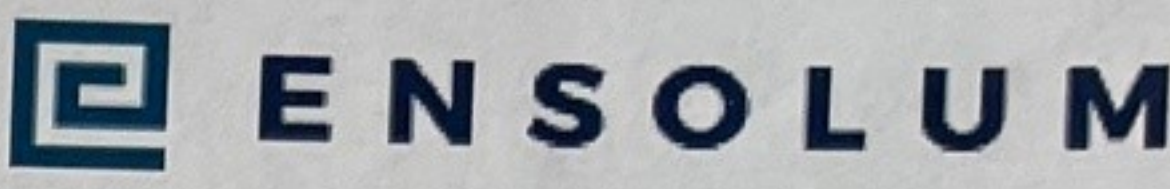
MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	8.0	N	1.83
MW02	10.25	Y	-0.16
MW03	9.25	N	0.66
MW06	8.0	N	-0.43
MW10	10.25	N	-0.56
MW15	10.25	N	0.03

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0

COMMENTS/MAINTENANCE ISSUES



STANDARD 1A DPE SYSTEM
O&M FORM

DATE: 8-23
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

DPE ALARMS: KO TANK HIGH LEVEL

DPE SYSTEM	READING	TIME
Blower Hours (photo)	5534.5	1305
Transfer Pump Hours (photo)	102.2	
Influent Vacuum Pre-KO (InHg)	0*	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	1.5	
Post-Filter Vacuum (InHg)	13.5	
Differential Pressure (IWC)	1.75	
Exhaust Temperature (°F)	21.5	
Exhaust PID (ppm)	121.7	
Transfer Pump Pressure (PSI)	6.0	
Transfer Pump Totalizer (Gal) (photo)	105583.3	

NOTES
* Gauge inoperable

SVE SYSTEM SAMPLING

SAMPLE ID:			
PID (ppm)	<u>79.6</u>	OXYGEN (%)	<u>20.9</u>
Analytes:	Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)		
OPERATING WELLS			

SAMPLE TIME: ppm
CARBON DIOXIDE (%) 1320

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%) ppm
MW01	131.4	140.9	20.5	1580
MW02	111.2	77.0	20.9	640
MW03	139.8	364.4	19.7	4040
MW06	132.4	33.7	20.7	900
MW10	79.2	50.6	20.9	820
MW15	141.3	12.5	20.9	20

CH₄ LEL
H₂S ppm
CO ppm
0 0 0
0 0 0
0 0.5 0
0 8.5 0
0 0 0
0 0 0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	8.0	N	1.27
MW02	11.0	Y	-0.08
MW03	8.5	N	2.33
MW06	7.75	N	0.12
MW10	11.25	N	-0.89
MW15	10.0	N	0.02

COMMENTS/MAINTENANCE ISSUES

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0

STANDARD 1A DPE SYSTEM
O&M FORM

DATE: 9-5
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

DPE ALARMS: KO TANK HIGH LEVEL

DPE SYSTEM	READING	TIME
Blower Hours (photo)	5848.4	1456
Transfer Pump Hours (photo)	105.7	
Influent Vacuum Pre-KO (InHg)	*	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	1.6	
Post-Filter Vacuum (InHg)	14.25	
Differential Pressure (IWC)	1.75	
Exhaust Temperature (°F)	225	
Exhaust PID (ppm)	156.1	
Transfer Pump Pressure (PSI)	5.75	
Transfer Pump Totalizer (Gal) (photo)	109915.0	

NOTES

* gauge inoperable

SVE SYSTEM SAMPLING

SAMPLE ID:	SVE-1	SAMPLE TIME:	1445
PID (ppm)	83.4	OXYGEN (%)	20.9
		CARBON DIOXIDE (%)	1080
Analytes:	Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)		
OPERATING WELLS			

Change in Well Operation:

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%)	CH ₄ LEL	H ₂ S ppm	CO ppm
MW01	135.8	205.8	20.3	1760	0	0	0
MW02	108.2	128.3	20.8	740	0	0	0
MW03	122.1	457.1	20.2	2980	0	0	0
MW06	130.2	48.7	20.6	1000	0	8.5	0
MW10	78.7	79.8	20.9	840	0	0	0
MW15	140.5	27.4	20.9	20	0	0	0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	8.25	N	-2.43
MW02	11.25	Y	-8.25
MW03	8.75	N	0.12
MW06	7.75	N	0.03
MW10	11.0	N	-8.31
MW15	10.75	N	-23.7

COMMENTS/MAINTENANCE ISSUES

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0

U M

STANDARD 1A DPE SYSTEM
O&M FORM

DATE: 9-23
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

DPE ALARMS: KO TANK HIGH LEVEL

DPE SYSTEM	READING	TIME
Blower Hours (photo)	6277.6	1205
Transfer Pump Hours (photo)	110.5	
Influent Vacuum Pre-KO (InHg)	*	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	16.5	
Post-Filter Vacuum (InHg)	14.75	
Differential Pressure (IWC)	1.5	
Exhaust Temperature (°F)	224	
Exhaust PID (ppm)	120.9	
Transfer Pump Pressure (PSI)	6	
Transfer Pump Totalizer (Gal) (photo)	115337.6	

NOTES

* Replaced gauge, but new gauge pressure maxed out.

SVE SYSTEM SAMPLING

SAMPLE ID: _____ SAMPLE TIME: _____
PID (ppm) 83.3 OXYGEN (%) 20.9 CARBON DIOXIDE (%) 1340
Analytes: Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)

OPERATING WELLS

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%) ppm	CH ₄ LEL	H ₂ S ppm	CO ppm
MW01	145.3	158.9	20.6	1880	0	0	0
MW02	122.8	77.7	20.2	1960	0	0.5	0
MW03	138.1	381.2	19.8	3860	0	0.5	0
MW06	135.4	35.8	20.8	1020	0	9.0	0
MW10	80.4	50.3	20.8	1380	0	0.5	0
MW15	174.4	32.2	20.7	1000	0	0.5	0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	8.0	N	1.31
MW02	10.5	Y	-0.11
MW03	9.0	N	0.83
MW06	8.0	N	-0.31
MW10	10.5	N	-0.87
MW15	10.25	N	0.02

COMMENTS/MAINTENANCE ISSUES

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0



APPENDIX B

Project Photographs

PROJECT PHOTOGRAPHS
Standard #1
San Juan County, New Mexico
Hilcorp Energy Company

Photograph 1 Runtime meter taken on June 27, 2024 at 1:30 PM Hours = 4,167.1	
Photograph 2 Runtime meter taken on September 23, 2024 at 12:05 PM Hours = 6,277.6	

PROJECT PHOTOGRAPHS
Standard #1
San Juan County, New Mexico
Hilcorp Energy Company

Photograph 3 Totalizer taken on March 21, 2024 at 10:52 AM Gallons = 40,443.4	
Photograph 4 Totalizer taken on June 27, 2024 at 1:30 PM Gallons = 84,339.2	



APPENDIX C

DPE Laboratory Analytical Reports



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/13/2024 12:58:23 PM

JOB DESCRIPTION

Standard 1

JOB NUMBER

885-8901-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

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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Authorized for release by
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(505)345-3975

Client: Hilcorp Energy
Project/Site: Standard 1

Laboratory Job ID: 885-8901-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Standard 1

Job ID: 885-8901-1

Job ID: 885-8901-1Eurofins Albuquerque

Job Narrative
885-8901-1

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 sample was received on 7/31/2024 6:30 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 24.2°C.

Subcontract Work

Method Fixed Gases: This method was subcontracted to Energy Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Gasoline Range Organics

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

GC/MS VOA

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

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

Client Sample ID: SVE-1

Lab Sample ID: 885-8901-1

Date Collected: 07/30/24 14:15

Matrix: Air

Date Received: 07/31/24 06:30

Sample Container: Tedlar Bag 1L

Method: SW846 8015M/D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	980		100	ug/L			08/05/24 15:18	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		52 - 172		08/05/24 15:18	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L			08/05/24 15:18	20
1,1,1-Trichloroethane	ND		2.0	ug/L			08/05/24 15:18	20
1,1,2,2-Tetrachloroethane	ND		4.0	ug/L			08/05/24 15:18	20
1,1,2-Trichloroethane	ND		2.0	ug/L			08/05/24 15:18	20
1,1-Dichloroethane	ND		2.0	ug/L			08/05/24 15:18	20
1,1-Dichloroethene	ND		2.0	ug/L			08/05/24 15:18	20
1,1-Dichloropropene	ND		2.0	ug/L			08/05/24 15:18	20
1,2,3-Trichlorobenzene	ND		2.0	ug/L			08/05/24 15:18	20
1,2,3-Trichloropropane	ND		4.0	ug/L			08/05/24 15:18	20
1,2,4-Trichlorobenzene	ND		2.0	ug/L			08/05/24 15:18	20
1,2,4-Trimethylbenzene	ND		2.0	ug/L			08/05/24 15:18	20
1,2-Dibromo-3-Chloropropane	ND		4.0	ug/L			08/05/24 15:18	20
1,2-Dibromoethane (EDB)	ND		2.0	ug/L			08/05/24 15:18	20
1,2-Dichlorobenzene	ND		2.0	ug/L			08/05/24 15:18	20
1,2-Dichloroethane (EDC)	ND		2.0	ug/L			08/05/24 15:18	20
1,2-Dichloropropane	ND		2.0	ug/L			08/05/24 15:18	20
1,3,5-Trimethylbenzene	ND		2.0	ug/L			08/05/24 15:18	20
1,3-Dichlorobenzene	ND		2.0	ug/L			08/05/24 15:18	20
1,3-Dichloropropane	ND		2.0	ug/L			08/05/24 15:18	20
1,4-Dichlorobenzene	ND		2.0	ug/L			08/05/24 15:18	20
1-Methylnaphthalene	ND		8.0	ug/L			08/05/24 15:18	20
2,2-Dichloropropane	ND		4.0	ug/L			08/05/24 15:18	20
2-Butanone	ND		20	ug/L			08/05/24 15:18	20
2-Chlorotoluene	ND		2.0	ug/L			08/05/24 15:18	20
2-Hexanone	ND		20	ug/L			08/05/24 15:18	20
2-Methylnaphthalene	ND		8.0	ug/L			08/05/24 15:18	20
4-Chlorotoluene	ND		2.0	ug/L			08/05/24 15:18	20
4-Isopropyltoluene	ND		2.0	ug/L			08/05/24 15:18	20
4-Methyl-2-pentanone	ND		20	ug/L			08/05/24 15:18	20
Acetone	ND		20	ug/L			08/05/24 15:18	20
Benzene	3.9		2.0	ug/L			08/05/24 15:18	20
Bromobenzene	ND		2.0	ug/L			08/05/24 15:18	20
Bromodichloromethane	ND		2.0	ug/L			08/05/24 15:18	20
Dibromochloromethane	ND		2.0	ug/L			08/05/24 15:18	20
Bromoform	ND		2.0	ug/L			08/05/24 15:18	20
Bromomethane	ND		6.0	ug/L			08/05/24 15:18	20
Carbon disulfide	ND		20	ug/L			08/05/24 15:18	20
Carbon tetrachloride	ND		2.0	ug/L			08/05/24 15:18	20
Chlorobenzene	ND		2.0	ug/L			08/05/24 15:18	20
Chloroethane	ND		4.0	ug/L			08/05/24 15:18	20
Chloroform	ND		2.0	ug/L			08/05/24 15:18	20

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Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

Client Sample ID: SVE-1
Date Collected: 07/30/24 14:15
Date Received: 07/31/24 06:30
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-8901-1
Matrix: Air

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloromethane	ND		6.0	ug/L			08/05/24 15:18	20	
cis-1,2-Dichloroethene	ND		2.0	ug/L			08/05/24 15:18	20	
cis-1,3-Dichloropropene	ND		2.0	ug/L			08/05/24 15:18	20	
Dibromomethane	ND		2.0	ug/L			08/05/24 15:18	20	
Dichlorodifluoromethane	ND		2.0	ug/L			08/05/24 15:18	20	
Ethylbenzene	ND		2.0	ug/L			08/05/24 15:18	20	
Hexachlorobutadiene	ND		2.0	ug/L			08/05/24 15:18	20	
Isopropylbenzene	ND		2.0	ug/L			08/05/24 15:18	20	
Methyl-tert-butyl Ether (MTBE)	ND		2.0	ug/L			08/05/24 15:18	20	
Methylene Chloride	ND		6.0	ug/L			08/05/24 15:18	20	
n-Butylbenzene	ND		6.0	ug/L			08/05/24 15:18	20	
N-Propylbenzene	ND		2.0	ug/L			08/05/24 15:18	20	
Naphthalene	ND		4.0	ug/L			08/05/24 15:18	20	
sec-Butylbenzene	ND		2.0	ug/L			08/05/24 15:18	20	
Styrene	ND		2.0	ug/L			08/05/24 15:18	20	
tert-Butylbenzene	ND		2.0	ug/L			08/05/24 15:18	20	
Tetrachloroethene (PCE)	ND		2.0	ug/L			08/05/24 15:18	20	
Toluene	7.3		2.0	ug/L			08/05/24 15:18	20	
trans-1,2-Dichloroethene	ND		2.0	ug/L			08/05/24 15:18	20	
trans-1,3-Dichloropropene	ND		2.0	ug/L			08/05/24 15:18	20	
Trichloroethene (TCE)	ND		2.0	ug/L			08/05/24 15:18	20	
Trichlorofluoromethane	ND		2.0	ug/L			08/05/24 15:18	20	
Vinyl chloride	ND		2.0	ug/L			08/05/24 15:18	20	
Xylenes, Total	6.6		3.0	ug/L			08/05/24 15:18	20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				08/05/24 15:18	20	
Toluene-d8 (Surr)	106		70 - 130				08/05/24 15:18	20	
4-Bromofluorobenzene (Surr)	99		70 - 130				08/05/24 15:18	20	
Dibromofluoromethane (Surr)	103		70 - 130				08/05/24 15:18	20	

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

Method: 8015M/D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)

Lab Sample ID: MB 885-9786/4

Matrix: Air

Analysis Batch: 9786

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	ug/L			08/05/24 13:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		52 - 172				08/05/24 13:40	1

Lab Sample ID: LCS 885-9786/3

Matrix: Air

Analysis Batch: 9786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	500	534		ug/L		107	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	94		52 - 172				

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

Lab Sample ID: MB 885-9723/31

Matrix: Air

Analysis Batch: 9723

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			08/05/24 13:40	1
1,1,1-Trichloroethane	ND		0.10	ug/L			08/05/24 13:40	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			08/05/24 13:40	1
1,1,2-Trichloroethane	ND		0.10	ug/L			08/05/24 13:40	1
1,1-Dichloroethane	ND		0.10	ug/L			08/05/24 13:40	1
1,1-Dichloroethene	ND		0.10	ug/L			08/05/24 13:40	1
1,1-Dichloropropene	ND		0.10	ug/L			08/05/24 13:40	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			08/05/24 13:40	1
1,2,3-Trichloropropane	ND		0.20	ug/L			08/05/24 13:40	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			08/05/24 13:40	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			08/05/24 13:40	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			08/05/24 13:40	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			08/05/24 13:40	1
1,2-Dichlorobenzene	ND		0.10	ug/L			08/05/24 13:40	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			08/05/24 13:40	1
1,2-Dichloropropane	ND		0.10	ug/L			08/05/24 13:40	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			08/05/24 13:40	1
1,3-Dichlorobenzene	ND		0.10	ug/L			08/05/24 13:40	1
1,3-Dichloropropane	ND		0.10	ug/L			08/05/24 13:40	1
1,4-Dichlorobenzene	ND		0.10	ug/L			08/05/24 13:40	1
1-Methylnaphthalene	ND		0.40	ug/L			08/05/24 13:40	1
2,2-Dichloropropane	ND		0.20	ug/L			08/05/24 13:40	1
2-Butanone	ND		1.0	ug/L			08/05/24 13:40	1
2-Chlorotoluene	ND		0.10	ug/L			08/05/24 13:40	1
2-Hexanone	ND		1.0	ug/L			08/05/24 13:40	1

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QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

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

Lab Sample ID: MB 885-9723/31

Matrix: Air

Analysis Batch: 9723

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.40	ug/L			08/05/24 13:40	1
4-Chlorotoluene	ND		0.10	ug/L			08/05/24 13:40	1
4-Isopropyltoluene	ND		0.10	ug/L			08/05/24 13:40	1
4-Methyl-2-pentanone	ND		1.0	ug/L			08/05/24 13:40	1
Acetone	ND		1.0	ug/L			08/05/24 13:40	1
Benzene	ND		0.10	ug/L			08/05/24 13:40	1
Bromobenzene	ND		0.10	ug/L			08/05/24 13:40	1
Bromodichloromethane	ND		0.10	ug/L			08/05/24 13:40	1
Dibromochloromethane	ND		0.10	ug/L			08/05/24 13:40	1
Bromoform	ND		0.10	ug/L			08/05/24 13:40	1
Bromomethane	ND		0.30	ug/L			08/05/24 13:40	1
Carbon disulfide	ND		1.0	ug/L			08/05/24 13:40	1
Carbon tetrachloride	ND		0.10	ug/L			08/05/24 13:40	1
Chlorobenzene	ND		0.10	ug/L			08/05/24 13:40	1
Chloroethane	ND		0.20	ug/L			08/05/24 13:40	1
Chloroform	ND		0.10	ug/L			08/05/24 13:40	1
Chloromethane	ND		0.30	ug/L			08/05/24 13:40	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			08/05/24 13:40	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			08/05/24 13:40	1
Dibromomethane	ND		0.10	ug/L			08/05/24 13:40	1
Dichlorodifluoromethane	ND		0.10	ug/L			08/05/24 13:40	1
Ethylbenzene	ND		0.10	ug/L			08/05/24 13:40	1
Hexachlorobutadiene	ND		0.10	ug/L			08/05/24 13:40	1
Isopropylbenzene	ND		0.10	ug/L			08/05/24 13:40	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			08/05/24 13:40	1
Methylene Chloride	ND		0.30	ug/L			08/05/24 13:40	1
n-Butylbenzene	ND		0.30	ug/L			08/05/24 13:40	1
N-Propylbenzene	ND		0.10	ug/L			08/05/24 13:40	1
Naphthalene	ND		0.20	ug/L			08/05/24 13:40	1
sec-Butylbenzene	ND		0.10	ug/L			08/05/24 13:40	1
Styrene	ND		0.10	ug/L			08/05/24 13:40	1
tert-Butylbenzene	ND		0.10	ug/L			08/05/24 13:40	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			08/05/24 13:40	1
Toluene	ND		0.10	ug/L			08/05/24 13:40	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			08/05/24 13:40	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			08/05/24 13:40	1
Trichloroethene (TCE)	ND		0.10	ug/L			08/05/24 13:40	1
Trichlorofluoromethane	ND		0.10	ug/L			08/05/24 13:40	1
Vinyl chloride	ND		0.10	ug/L			08/05/24 13:40	1
Xylenes, Total	ND		0.15	ug/L			08/05/24 13:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		08/05/24 13:40	1
Toluene-d8 (Surr)	96		70 - 130		08/05/24 13:40	1
4-Bromofluorobenzene (Surr)	97		70 - 130		08/05/24 13:40	1
Dibromofluoromethane (Surr)	108		70 - 130		08/05/24 13:40	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

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

Lab Sample ID: MB 885-9723/8

Matrix: Air

Analysis Batch: 9723

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			08/05/24 13:40	1
1,1,1-Trichloroethane	ND		1.0	ug/L			08/05/24 13:40	1
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			08/05/24 13:40	1
1,1,2-Trichloroethane	ND		1.0	ug/L			08/05/24 13:40	1
1,1-Dichloroethane	ND		1.0	ug/L			08/05/24 13:40	1
1,1-Dichloroethene	ND		1.0	ug/L			08/05/24 13:40	1
1,1-Dichloropropene	ND		1.0	ug/L			08/05/24 13:40	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			08/05/24 13:40	1
1,2,3-Trichloropropane	ND		2.0	ug/L			08/05/24 13:40	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			08/05/24 13:40	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			08/05/24 13:40	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			08/05/24 13:40	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			08/05/24 13:40	1
1,2-Dichlorobenzene	ND		1.0	ug/L			08/05/24 13:40	1
1,2-Dichloroethane (EDC)	ND		1.0	ug/L			08/05/24 13:40	1
1,2-Dichloropropane	ND		1.0	ug/L			08/05/24 13:40	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			08/05/24 13:40	1
1,3-Dichlorobenzene	ND		1.0	ug/L			08/05/24 13:40	1
1,3-Dichloropropane	ND		1.0	ug/L			08/05/24 13:40	1
1,4-Dichlorobenzene	ND		1.0	ug/L			08/05/24 13:40	1
1-Methylnaphthalene	ND		4.0	ug/L			08/05/24 13:40	1
2,2-Dichloropropane	ND		2.0	ug/L			08/05/24 13:40	1
2-Butanone	ND		10	ug/L			08/05/24 13:40	1
2-Chlorotoluene	ND		1.0	ug/L			08/05/24 13:40	1
2-Hexanone	ND		10	ug/L			08/05/24 13:40	1
2-Methylnaphthalene	ND		4.0	ug/L			08/05/24 13:40	1
4-Chlorotoluene	ND		1.0	ug/L			08/05/24 13:40	1
4-Isopropyltoluene	ND		1.0	ug/L			08/05/24 13:40	1
4-Methyl-2-pentanone	ND		10	ug/L			08/05/24 13:40	1
Acetone	ND		10	ug/L			08/05/24 13:40	1
Benzene	ND		1.0	ug/L			08/05/24 13:40	1
Bromobenzene	ND		1.0	ug/L			08/05/24 13:40	1
Bromodichloromethane	ND		1.0	ug/L			08/05/24 13:40	1
Dibromochloromethane	ND		1.0	ug/L			08/05/24 13:40	1
Bromoform	ND		1.0	ug/L			08/05/24 13:40	1
Bromomethane	ND		3.0	ug/L			08/05/24 13:40	1
Carbon disulfide	ND		10	ug/L			08/05/24 13:40	1
Carbon tetrachloride	ND		1.0	ug/L			08/05/24 13:40	1
Chlorobenzene	ND		1.0	ug/L			08/05/24 13:40	1
Chloroethane	ND		2.0	ug/L			08/05/24 13:40	1
Chloroform	ND		1.0	ug/L			08/05/24 13:40	1
Chloromethane	ND		3.0	ug/L			08/05/24 13:40	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			08/05/24 13:40	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			08/05/24 13:40	1
Dibromomethane	ND		1.0	ug/L			08/05/24 13:40	1
Dichlorodifluoromethane	ND		1.0	ug/L			08/05/24 13:40	1
Ethylbenzene	ND		1.0	ug/L			08/05/24 13:40	1
Hexachlorobutadiene	ND		1.0	ug/L			08/05/24 13:40	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

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

Lab Sample ID: MB 885-9723/8
Matrix: Air
Analysis Batch: 9723

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

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Isopropylbenzene	ND		1.0	ug/L			08/05/24 13:40	1
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L			08/05/24 13:40	1
Methylene Chloride	ND		3.0	ug/L			08/05/24 13:40	1
n-Butylbenzene	ND		3.0	ug/L			08/05/24 13:40	1
N-Propylbenzene	ND		1.0	ug/L			08/05/24 13:40	1
Naphthalene	ND		2.0	ug/L			08/05/24 13:40	1
sec-Butylbenzene	ND		1.0	ug/L			08/05/24 13:40	1
Styrene	ND		1.0	ug/L			08/05/24 13:40	1
tert-Butylbenzene	ND		1.0	ug/L			08/05/24 13:40	1
Tetrachloroethene (PCE)	ND		1.0	ug/L			08/05/24 13:40	1
Toluene	ND		1.0	ug/L			08/05/24 13:40	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/05/24 13:40	1
trans-1,3-Dichloropropene	ND		1.0	ug/L			08/05/24 13:40	1
Trichloroethene (TCE)	ND		1.0	ug/L			08/05/24 13:40	1
Trichlorofluoromethane	ND		1.0	ug/L			08/05/24 13:40	1
Vinyl chloride	ND		1.0	ug/L			08/05/24 13:40	1
Xylenes, Total	ND		1.5	ug/L			08/05/24 13:40	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		08/05/24 13:40	1
Toluene-d8 (Surr)	96		70 - 130		08/05/24 13:40	1
4-Bromofluorobenzene (Surr)	97		70 - 130		08/05/24 13:40	1
Dibromofluoromethane (Surr)	108		70 - 130		08/05/24 13:40	1

Lab Sample ID: LCS 885-9723/4
Matrix: Air
Analysis Batch: 9723

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

Analyte	Spike Added	LCS Result	LCS	Unit	D	%Rec	%Rec Limits
			Qualifier				
1,1-Dichloroethene	20.1	21.4		ug/L		106	70 - 130
Benzene	20.1	23.0		ug/L		115	70 - 130
Chlorobenzene	20.1	21.2		ug/L		105	70 - 130
Toluene	20.2	20.8		ug/L		103	70 - 130
Trichloroethene (TCE)	20.2	22.2		ug/L		110	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
Toluene-d8 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130

QC Association Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

GC/MS VOA

Analysis Batch: 9723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8901-1	SVE-1	Total/NA	Air	8260B	
MB 885-9723/31	Method Blank	Total/NA	Air	8260B	
MB 885-9723/8	Method Blank	Total/NA	Air	8260B	
LCS 885-9723/4	Lab Control Sample	Total/NA	Air	8260B	

Analysis Batch: 9786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-8901-1	SVE-1	Total/NA	Air	8015M/D	
MB 885-9786/4	Method Blank	Total/NA	Air	8015M/D	
LCS 885-9786/3	Lab Control Sample	Total/NA	Air	8015M/D	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

Client Sample ID: SVE-1
Date Collected: 07/30/24 14:15
Date Received: 07/31/24 06:30

Lab Sample ID: 885-8901-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015M/D		20	9786	CM	EET ALB	08/05/24 15:18
Total/NA	Analysis	8260B		20	9723	CM	EET ALB	08/05/24 15:18

Laboratory References:

= , 1120 South 27th Street, Billings, MT 59101, TEL (406)252-6325

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

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
8015M/D		Air	Gasoline Range Organics [C6 - C10]
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

Laboratory: Eurofins Albuquerque (Continued)

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

Authority	Program	Identification Number	Expiration Date
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
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total
Oregon	NELAP	NM100001	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
8015M/D		Air	Gasoline Range Organics [C6 - C10]
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-8901-1

Laboratory: Eurofins Albuquerque (Continued)

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

Authority	Program	Identification Number	Expiration Date
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
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total



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ANALYTICAL SUMMARY REPORT

August 12, 2024

Hall Environmental

4901 Hawkins St NE Ste D

Albuquerque, NM 87109-4372

Work Order: B24080135

Quote ID: B15626

Project Name: Standard 1, 88501698

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 8/1/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24080135-001	SVE-1 (885-8901-1)	07/30/24 14:15	08/01/24	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond./1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



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LABORATORY ANALYTICAL REPORT
Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Standard 1, 88501698
Lab ID: B24080135-001
Client Sample ID: SVE-1 (885-8901-1)

Report Date: 08/12/24
Collection Date: 07/30/24 14:15
Date Received: 08/01/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.14	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Nitrogen	78.53	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Carbon Dioxide	0.27	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Hexanes plus	0.06	Mol %		0.01		GPA 2261-95	08/05/24 10:07 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
Hexanes plus	0.025	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
GPM Total	0.025	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
GPM Pentanes plus	0.025	gpm		0.001		GPA 2261-95	08/05/24 10:07 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	3			1		GPA 2261-95	08/05/24 10:07 / jrj
Net BTU per cu ft @ std cond. (LHV)	3			1		GPA 2261-95	08/05/24 10:07 / jrj
Pseudo-critical Pressure, psia	545			1		GPA 2261-95	08/05/24 10:07 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	08/05/24 10:07 / jrj
Specific Gravity @ 60/60F	0.999			0.001		D3588-81	08/05/24 10:07 / jrj
Air, %	96.61			0.01		GPA 2261-95	08/05/24 10:07 / jrj
- The analysis was not corrected for air.							

COMMENTS

-
-
- BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior.
- GPM = gallons of liquid at standard conditions per 1000 cu. ft. of moisture free gas @ standard conditions.
- To convert BTU to a water-saturated basis @ standard conditions, multiply by 0.9825.
- Standard conditions: 60 F & 14.73 psi on a dry basis
- 08/05/24 10:07 / jrj

Report Definitions: RL - Analyte Reporting Limit MCL - Maximum Contaminant Level
QCL - Quality Control Limit ND - Not detected at the Reporting Limit (RL)



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 Gillette, WY **307.686.7175** • Helena, MT **406.442.0711**

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Work Order: B24080135

Report Date: 08/12/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95										Batch: R426552
Lab ID: LCS080524	11	Laboratory Control Sample				Run: GCNGA-B_240805A			08/05/24 05:25	
Oxygen		0.65	Mol %	0.01	130	70	130			
Nitrogen		6.23	Mol %	0.01	104	70	130			
Carbon Dioxide		0.99	Mol %	0.01	100	70	130			
Methane		74.8	Mol %	0.01	100	70	130			
Ethane		5.84	Mol %	0.01	97	70	130			
Propane		5.03	Mol %	0.01	102	70	130			
Isobutane		1.63	Mol %	0.01	81	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		1.03	Mol %	0.01	103	70	130			
n-Pentane		1.00	Mol %	0.01	100	70	130			
Hexanes plus		0.79	Mol %	0.01	99	70	130			
Lab ID: B24080136-001ADUP	12	Sample Duplicate				Run: GCNGA-B_240805A			08/05/24 11:45	
Oxygen		21.3	Mol %	0.01				0.1	20	
Nitrogen		78.4	Mol %	0.01				0	20	
Carbon Dioxide		0.27	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		0.05	Mol %	0.01				0.0	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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Work Order Receipt Checklist

Hall Environmental

B24080135

Login completed by: Lyndsi E. LeProwse

Date Received: 8/1/2024

Reviewed by: gmccartney

Received by: KOF

Reviewed Date: 8/10/2024

Carrier name: FedEx NDA

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☒	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☒	Not Applicable ☐
Container/Temp Blank temperature:	22.1°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None



Eurolins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-3976

Chain of Custody Record



Environment Testing

[illegible]

ICOC No:
885-1444

Containers

Count	Container Type	Preservative
1	Tedlar Bag 1L	None

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1	SUBCONTRACT	SUB (Fixed Gases)/ Fixed Gases	Fixed Gases

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Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-8901-1

Login Number: 8901

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.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/24/2024 4:03:44 PM

JOB DESCRIPTION

Standard 1

JOB NUMBER

885-11304-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

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

Client: Hilcorp Energy
Project/Site: Standard 1

Laboratory Job ID: 885-11304-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: Standard 1

Job ID: 885-11304-1

Job ID: 885-11304-1

Eurofins Albuquerque

Job Narrative 885-11304-1

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 sample was received on 9/6/2024 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

Subcontract Work

Method Fixed Gases - Energy Lab: This method was subcontracted to Energy Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Gasoline Range Organics

Method 8015D_GRO_MS: Reanalysis was performed for sampleSVE-1 (885-11304-1), (885-11320-A-1 ^5) and (885-11320-A-1 DU) 24 hours outside of hold time for GRO C6-C10 only. Initial analysis for 8260B was within hold times but no GRO QC was run on that date. 885-11320, 885-11321, and 85-11322 were run on day zero.

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

GC/MS VOA

Method 8260B: The sample duplicate (DUP) precision for analytical batch 885-12295 air bag at x5 dilution was outside control limits for m&p-xylene and o-xylene. Sample matrix interference is suspected.

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

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

Client Sample ID: SVE-1

Lab Sample ID: 885-11304-1

Date Collected: 09/05/24 14:45

Matrix: Air

Date Received: 09/06/24 08:00

Sample Container: Tedlar Bag 1L

Method: SW846 8015M/D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	680	H	100	ug/L			09/20/24 11:50	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		52 - 172		09/20/24 11:50	20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	ug/L			09/16/24 14:49	20
1,1,1-Trichloroethane	ND		2.0	ug/L			09/16/24 14:49	20
1,1,2,2-Tetrachloroethane	ND		4.0	ug/L			09/16/24 14:49	20
1,1,2-Trichloroethane	ND		2.0	ug/L			09/16/24 14:49	20
1,1-Dichloroethane	ND		2.0	ug/L			09/16/24 14:49	20
1,1-Dichloroethene	ND		2.0	ug/L			09/16/24 14:49	20
1,1-Dichloropropene	ND		2.0	ug/L			09/16/24 14:49	20
1,2,3-Trichlorobenzene	ND		2.0	ug/L			09/16/24 14:49	20
1,2,3-Trichloropropane	ND		4.0	ug/L			09/16/24 14:49	20
1,2,4-Trichlorobenzene	ND		2.0	ug/L			09/16/24 14:49	20
1,2,4-Trimethylbenzene	ND		2.0	ug/L			09/16/24 14:49	20
1,2-Dibromo-3-Chloropropane	ND		4.0	ug/L			09/16/24 14:49	20
1,2-Dibromoethane (EDB)	ND		2.0	ug/L			09/16/24 14:49	20
1,2-Dichlorobenzene	ND		2.0	ug/L			09/16/24 14:49	20
1,2-Dichloroethane (EDC)	ND		2.0	ug/L			09/16/24 14:49	20
1,2-Dichloropropane	ND		2.0	ug/L			09/16/24 14:49	20
1,3,5-Trimethylbenzene	ND		2.0	ug/L			09/16/24 14:49	20
1,3-Dichlorobenzene	ND		2.0	ug/L			09/16/24 14:49	20
1,3-Dichloropropane	ND		2.0	ug/L			09/16/24 14:49	20
1,4-Dichlorobenzene	ND		2.0	ug/L			09/16/24 14:49	20
1-Methylnaphthalene	ND		8.0	ug/L			09/16/24 14:49	20
2,2-Dichloropropane	ND		4.0	ug/L			09/16/24 14:49	20
2-Butanone	ND		20	ug/L			09/16/24 14:49	20
2-Chlorotoluene	ND		2.0	ug/L			09/16/24 14:49	20
2-Hexanone	ND		20	ug/L			09/16/24 14:49	20
2-Methylnaphthalene	ND		8.0	ug/L			09/16/24 14:49	20
4-Chlorotoluene	ND		2.0	ug/L			09/16/24 14:49	20
4-Isopropyltoluene	ND		2.0	ug/L			09/16/24 14:49	20
4-Methyl-2-pentanone	ND		20	ug/L			09/16/24 14:49	20
Acetone	ND		20	ug/L			09/16/24 14:49	20
Benzene	3.2		2.0	ug/L			09/16/24 14:49	20
Bromobenzene	ND		2.0	ug/L			09/16/24 14:49	20
Bromodichloromethane	ND		2.0	ug/L			09/16/24 14:49	20
Dibromochloromethane	ND		2.0	ug/L			09/16/24 14:49	20
Bromoform	ND		2.0	ug/L			09/16/24 14:49	20
Bromomethane	ND		6.0	ug/L			09/16/24 14:49	20
Carbon disulfide	ND		20	ug/L			09/16/24 14:49	20
Carbon tetrachloride	ND		2.0	ug/L			09/16/24 14:49	20
Chlorobenzene	ND		2.0	ug/L			09/16/24 14:49	20
Chloroethane	ND		4.0	ug/L			09/16/24 14:49	20
Chloroform	ND		2.0	ug/L			09/16/24 14:49	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

Client Sample ID: SVE-1
Date Collected: 09/05/24 14:45
Date Received: 09/06/24 08:00
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-11304-1
Matrix: Air

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloromethane	ND		6.0	ug/L			09/16/24 14:49	20	
cis-1,2-Dichloroethene	ND		2.0	ug/L			09/16/24 14:49	20	
cis-1,3-Dichloropropene	ND		2.0	ug/L			09/16/24 14:49	20	
Dibromomethane	ND		2.0	ug/L			09/16/24 14:49	20	
Dichlorodifluoromethane	ND		2.0	ug/L			09/16/24 14:49	20	
Ethylbenzene	ND		2.0	ug/L			09/16/24 14:49	20	
Hexachlorobutadiene	ND		2.0	ug/L			09/16/24 14:49	20	
Isopropylbenzene	ND		2.0	ug/L			09/16/24 14:49	20	
Methyl-tert-butyl Ether (MTBE)	ND		2.0	ug/L			09/16/24 14:49	20	
Methylene Chloride	ND		6.0	ug/L			09/16/24 14:49	20	
n-Butylbenzene	ND		6.0	ug/L			09/16/24 14:49	20	
N-Propylbenzene	ND		2.0	ug/L			09/16/24 14:49	20	
Naphthalene	ND		4.0	ug/L			09/16/24 14:49	20	
sec-Butylbenzene	ND		2.0	ug/L			09/16/24 14:49	20	
Styrene	ND		2.0	ug/L			09/16/24 14:49	20	
tert-Butylbenzene	ND		2.0	ug/L			09/16/24 14:49	20	
Tetrachloroethene (PCE)	ND		2.0	ug/L			09/16/24 14:49	20	
Toluene	8.1		2.0	ug/L			09/16/24 14:49	20	
trans-1,2-Dichloroethene	ND		2.0	ug/L			09/16/24 14:49	20	
trans-1,3-Dichloropropene	ND		2.0	ug/L			09/16/24 14:49	20	
Trichloroethene (TCE)	ND		2.0	ug/L			09/16/24 14:49	20	
Trichlorofluoromethane	ND		2.0	ug/L			09/16/24 14:49	20	
Vinyl chloride	ND		2.0	ug/L			09/16/24 14:49	20	
Xylenes, Total	6.6		3.0	ug/L			09/16/24 14:49	20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	85		70 - 130				09/16/24 14:49	20	
Toluene-d8 (Surr)	111		70 - 130				09/16/24 14:49	20	
4-Bromofluorobenzene (Surr)	104		70 - 130				09/16/24 14:49	20	
Dibromofluoromethane (Surr)	98		70 - 130				09/16/24 14:49	20	

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

Method: 8015M/D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)

Lab Sample ID: MB 885-12775/4

Matrix: Air

Analysis Batch: 12775

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	ug/L			09/20/24 11:25	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		52 - 172				09/20/24 11:25	1

Lab Sample ID: LCS 885-12775/3

Matrix: Air

Analysis Batch: 12775

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	4250	4700		ug/L		111	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	94		52 - 172				

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

Lab Sample ID: MB 885-12295/1006

Matrix: Air

Analysis Batch: 12295

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			09/16/24 12:46	1
1,1,1-Trichloroethane	ND		0.10	ug/L			09/16/24 12:46	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			09/16/24 12:46	1
1,1,2-Trichloroethane	ND		0.10	ug/L			09/16/24 12:46	1
1,1-Dichloroethane	ND		0.10	ug/L			09/16/24 12:46	1
1,1-Dichloroethene	ND		0.10	ug/L			09/16/24 12:46	1
1,1-Dichloropropene	ND		0.10	ug/L			09/16/24 12:46	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			09/16/24 12:46	1
1,2,3-Trichloropropane	ND		0.20	ug/L			09/16/24 12:46	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			09/16/24 12:46	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			09/16/24 12:46	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			09/16/24 12:46	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			09/16/24 12:46	1
1,2-Dichlorobenzene	ND		0.10	ug/L			09/16/24 12:46	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			09/16/24 12:46	1
1,2-Dichloropropane	ND		0.10	ug/L			09/16/24 12:46	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			09/16/24 12:46	1
1,3-Dichlorobenzene	ND		0.10	ug/L			09/16/24 12:46	1
1,3-Dichloropropane	ND		0.10	ug/L			09/16/24 12:46	1
1,4-Dichlorobenzene	ND		0.10	ug/L			09/16/24 12:46	1
1-Methylnaphthalene	ND		0.40	ug/L			09/16/24 12:46	1
2,2-Dichloropropane	ND		0.20	ug/L			09/16/24 12:46	1
2-Butanone	ND		1.0	ug/L			09/16/24 12:46	1
2-Chlorotoluene	ND		0.10	ug/L			09/16/24 12:46	1
2-Hexanone	ND		1.0	ug/L			09/16/24 12:46	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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

Lab Sample ID: MB 885-12295/1006				Client Sample ID: Method Blank				
Matrix: Air				Prep Type: Total/NA				
Analysis Batch: 12295								
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.40	ug/L			09/16/24 12:46	1
4-Chlorotoluene	ND		0.10	ug/L			09/16/24 12:46	1
4-Isopropyltoluene	ND		0.10	ug/L			09/16/24 12:46	1
4-Methyl-2-pentanone	ND		1.0	ug/L			09/16/24 12:46	1
Acetone	ND		1.0	ug/L			09/16/24 12:46	1
Benzene	ND		0.10	ug/L			09/16/24 12:46	1
Bromobenzene	ND		0.10	ug/L			09/16/24 12:46	1
Bromodichloromethane	ND		0.10	ug/L			09/16/24 12:46	1
Dibromochloromethane	ND		0.10	ug/L			09/16/24 12:46	1
Bromoform	ND		0.10	ug/L			09/16/24 12:46	1
Bromomethane	ND		0.30	ug/L			09/16/24 12:46	1
Carbon disulfide	ND		1.0	ug/L			09/16/24 12:46	1
Carbon tetrachloride	ND		0.10	ug/L			09/16/24 12:46	1
Chlorobenzene	ND		0.10	ug/L			09/16/24 12:46	1
Chloroethane	ND		0.20	ug/L			09/16/24 12:46	1
Chloroform	ND		0.10	ug/L			09/16/24 12:46	1
Chloromethane	ND		0.30	ug/L			09/16/24 12:46	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			09/16/24 12:46	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			09/16/24 12:46	1
Dibromomethane	ND		0.10	ug/L			09/16/24 12:46	1
Dichlorodifluoromethane	ND		0.10	ug/L			09/16/24 12:46	1
Ethylbenzene	ND		0.10	ug/L			09/16/24 12:46	1
Hexachlorobutadiene	ND		0.10	ug/L			09/16/24 12:46	1
Isopropylbenzene	ND		0.10	ug/L			09/16/24 12:46	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			09/16/24 12:46	1
Methylene Chloride	ND		0.30	ug/L			09/16/24 12:46	1
n-Butylbenzene	ND		0.30	ug/L			09/16/24 12:46	1
N-Propylbenzene	ND		0.10	ug/L			09/16/24 12:46	1
Naphthalene	ND		0.20	ug/L			09/16/24 12:46	1
sec-Butylbenzene	ND		0.10	ug/L			09/16/24 12:46	1
Styrene	ND		0.10	ug/L			09/16/24 12:46	1
tert-Butylbenzene	ND		0.10	ug/L			09/16/24 12:46	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			09/16/24 12:46	1
Toluene	ND		0.10	ug/L			09/16/24 12:46	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			09/16/24 12:46	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			09/16/24 12:46	1
Trichloroethene (TCE)	ND		0.10	ug/L			09/16/24 12:46	1
Trichlorofluoromethane	ND		0.10	ug/L			09/16/24 12:46	1
Vinyl chloride	ND		0.10	ug/L			09/16/24 12:46	1
Xylenes, Total	ND		0.15	ug/L			09/16/24 12:46	1
	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 130				09/16/24 12:46	1
Toluene-d8 (Surr)	100		70 - 130				09/16/24 12:46	1
4-Bromofluorobenzene (Surr)	99		70 - 130				09/16/24 12:46	1
Dibromofluoromethane (Surr)	102		70 - 130				09/16/24 12:46	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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

Lab Sample ID: MB 885-12295/6

Matrix: Air

Analysis Batch: 12295

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/16/24 12:46	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/16/24 12:46	1
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			09/16/24 12:46	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/16/24 12:46	1
1,1-Dichloroethane	ND		1.0	ug/L			09/16/24 12:46	1
1,1-Dichloroethene	ND		1.0	ug/L			09/16/24 12:46	1
1,1-Dichloropropene	ND		1.0	ug/L			09/16/24 12:46	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/16/24 12:46	1
1,2,3-Trichloropropane	ND		2.0	ug/L			09/16/24 12:46	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/16/24 12:46	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/16/24 12:46	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			09/16/24 12:46	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/16/24 12:46	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/16/24 12:46	1
1,2-Dichloroethane (EDC)	ND		1.0	ug/L			09/16/24 12:46	1
1,2-Dichloropropane	ND		1.0	ug/L			09/16/24 12:46	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/16/24 12:46	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/16/24 12:46	1
1,3-Dichloropropane	ND		1.0	ug/L			09/16/24 12:46	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/16/24 12:46	1
1-Methylnaphthalene	ND		4.0	ug/L			09/16/24 12:46	1
2,2-Dichloropropane	ND		2.0	ug/L			09/16/24 12:46	1
2-Butanone	ND		10	ug/L			09/16/24 12:46	1
2-Chlorotoluene	ND		1.0	ug/L			09/16/24 12:46	1
2-Hexanone	ND		10	ug/L			09/16/24 12:46	1
2-Methylnaphthalene	ND		4.0	ug/L			09/16/24 12:46	1
4-Chlorotoluene	ND		1.0	ug/L			09/16/24 12:46	1
4-Isopropyltoluene	ND		1.0	ug/L			09/16/24 12:46	1
4-Methyl-2-pentanone	ND		10	ug/L			09/16/24 12:46	1
Acetone	ND		10	ug/L			09/16/24 12:46	1
Benzene	ND		1.0	ug/L			09/16/24 12:46	1
Bromobenzene	ND		1.0	ug/L			09/16/24 12:46	1
Bromodichloromethane	ND		1.0	ug/L			09/16/24 12:46	1
Dibromochloromethane	ND		1.0	ug/L			09/16/24 12:46	1
Bromoform	ND		1.0	ug/L			09/16/24 12:46	1
Bromomethane	ND		3.0	ug/L			09/16/24 12:46	1
Carbon disulfide	ND		10	ug/L			09/16/24 12:46	1
Carbon tetrachloride	ND		1.0	ug/L			09/16/24 12:46	1
Chlorobenzene	ND		1.0	ug/L			09/16/24 12:46	1
Chloroethane	ND		2.0	ug/L			09/16/24 12:46	1
Chloroform	ND		1.0	ug/L			09/16/24 12:46	1
Chloromethane	ND		3.0	ug/L			09/16/24 12:46	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/16/24 12:46	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			09/16/24 12:46	1
Dibromomethane	ND		1.0	ug/L			09/16/24 12:46	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/16/24 12:46	1
Ethylbenzene	ND		1.0	ug/L			09/16/24 12:46	1
Hexachlorobutadiene	ND		1.0	ug/L			09/16/24 12:46	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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

Lab Sample ID: MB 885-12295/6

Matrix: Air

Analysis Batch: 12295

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Isopropylbenzene	ND		1.0	ug/L			09/16/24 12:46	1
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L			09/16/24 12:46	1
Methylene Chloride	ND		3.0	ug/L			09/16/24 12:46	1
n-Butylbenzene	ND		3.0	ug/L			09/16/24 12:46	1
N-Propylbenzene	ND		1.0	ug/L			09/16/24 12:46	1
Naphthalene	ND		2.0	ug/L			09/16/24 12:46	1
sec-Butylbenzene	ND		1.0	ug/L			09/16/24 12:46	1
Styrene	ND		1.0	ug/L			09/16/24 12:46	1
tert-Butylbenzene	ND		1.0	ug/L			09/16/24 12:46	1
Tetrachloroethene (PCE)	ND		1.0	ug/L			09/16/24 12:46	1
Toluene	ND		1.0	ug/L			09/16/24 12:46	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/16/24 12:46	1
trans-1,3-Dichloropropene	ND		1.0	ug/L			09/16/24 12:46	1
Trichloroethene (TCE)	ND		1.0	ug/L			09/16/24 12:46	1
Trichlorofluoromethane	ND		1.0	ug/L			09/16/24 12:46	1
Vinyl chloride	ND		1.0	ug/L			09/16/24 12:46	1
Xylenes, Total	ND		1.5	ug/L			09/16/24 12:46	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	90		70 - 130		09/16/24 12:46	1
Toluene-d8 (Surr)	100		70 - 130		09/16/24 12:46	1
4-Bromofluorobenzene (Surr)	99		70 - 130		09/16/24 12:46	1
Dibromofluoromethane (Surr)	102		70 - 130		09/16/24 12:46	1

Lab Sample ID: STOBLK 885-12295/49

Matrix: Air

Analysis Batch: 12295

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	STOBLK	STOBLK	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/17/24 06:38	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/17/24 06:38	1
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			09/17/24 06:38	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/17/24 06:38	1
1,1-Dichloroethane	ND		1.0	ug/L			09/17/24 06:38	1
1,1-Dichloroethene	ND		1.0	ug/L			09/17/24 06:38	1
1,1-Dichloropropene	ND		1.0	ug/L			09/17/24 06:38	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/17/24 06:38	1
1,2,3-Trichloropropane	ND		2.0	ug/L			09/17/24 06:38	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/17/24 06:38	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/17/24 06:38	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			09/17/24 06:38	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/17/24 06:38	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/17/24 06:38	1
1,2-Dichloroethane (EDC)	ND		1.0	ug/L			09/17/24 06:38	1
1,2-Dichloropropane	ND		1.0	ug/L			09/17/24 06:38	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/17/24 06:38	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/17/24 06:38	1
1,3-Dichloropropane	ND		1.0	ug/L			09/17/24 06:38	1

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QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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

Lab Sample ID: STOBK 885-12295/49

Matrix: Air

Analysis Batch: 12295

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	STOBK Result	STOBK Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	ug/L			09/17/24 06:38	1
1-Methylnaphthalene	ND		4.0	ug/L			09/17/24 06:38	1
2,2-Dichloropropane	ND		2.0	ug/L			09/17/24 06:38	1
2-Butanone	ND		10	ug/L			09/17/24 06:38	1
2-Chlorotoluene	ND		1.0	ug/L			09/17/24 06:38	1
2-Hexanone	ND		10	ug/L			09/17/24 06:38	1
2-Methylnaphthalene	ND		4.0	ug/L			09/17/24 06:38	1
4-Chlorotoluene	ND		1.0	ug/L			09/17/24 06:38	1
4-Isopropyltoluene	ND		1.0	ug/L			09/17/24 06:38	1
4-Methyl-2-pentanone	ND		10	ug/L			09/17/24 06:38	1
Acetone	ND		10	ug/L			09/17/24 06:38	1
Benzene	ND		1.0	ug/L			09/17/24 06:38	1
Bromobenzene	ND		1.0	ug/L			09/17/24 06:38	1
Bromodichloromethane	ND		1.0	ug/L			09/17/24 06:38	1
Dibromochloromethane	ND		1.0	ug/L			09/17/24 06:38	1
Bromoform	ND		1.0	ug/L			09/17/24 06:38	1
Bromomethane	ND		3.0	ug/L			09/17/24 06:38	1
Carbon disulfide	ND		10	ug/L			09/17/24 06:38	1
Carbon tetrachloride	ND		1.0	ug/L			09/17/24 06:38	1
Chlorobenzene	ND		1.0	ug/L			09/17/24 06:38	1
Chloroethane	ND		2.0	ug/L			09/17/24 06:38	1
Chloroform	ND		1.0	ug/L			09/17/24 06:38	1
Chloromethane	ND		3.0	ug/L			09/17/24 06:38	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/17/24 06:38	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			09/17/24 06:38	1
Dibromomethane	ND		1.0	ug/L			09/17/24 06:38	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/17/24 06:38	1
Ethylbenzene	ND		1.0	ug/L			09/17/24 06:38	1
Hexachlorobutadiene	ND		1.0	ug/L			09/17/24 06:38	1
Isopropylbenzene	ND		1.0	ug/L			09/17/24 06:38	1
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L			09/17/24 06:38	1
Methylene Chloride	ND		3.0	ug/L			09/17/24 06:38	1
n-Butylbenzene	ND		3.0	ug/L			09/17/24 06:38	1
N-Propylbenzene	ND		1.0	ug/L			09/17/24 06:38	1
Naphthalene	ND		2.0	ug/L			09/17/24 06:38	1
sec-Butylbenzene	ND		1.0	ug/L			09/17/24 06:38	1
Styrene	ND		1.0	ug/L			09/17/24 06:38	1
tert-Butylbenzene	ND		1.0	ug/L			09/17/24 06:38	1
Tetrachloroethene (PCE)	ND		1.0	ug/L			09/17/24 06:38	1
Toluene	ND		1.0	ug/L			09/17/24 06:38	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/17/24 06:38	1
trans-1,3-Dichloropropene	ND		1.0	ug/L			09/17/24 06:38	1
Trichloroethene (TCE)	ND		1.0	ug/L			09/17/24 06:38	1
Trichlorofluoromethane	ND		1.0	ug/L			09/17/24 06:38	1
Vinyl chloride	ND		1.0	ug/L			09/17/24 06:38	1
Xylenes, Total	ND		1.5	ug/L			09/17/24 06:38	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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

Lab Sample ID: STOBLK 885-12295/49

Matrix: Air

Analysis Batch: 12295

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	STOBLK %Recovery	STOBLK Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		09/17/24 06:38	1
Toluene-d8 (Surr)	101		70 - 130		09/17/24 06:38	1
4-Bromofluorobenzene (Surr)	99		70 - 130		09/17/24 06:38	1
Dibromofluoromethane (Surr)	103		70 - 130		09/17/24 06:38	1

Lab Sample ID: LCS 885-12295/5

Matrix: Air

Analysis Batch: 12295

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	20.1	22.0		ug/L		109	70 - 130
Benzene	20.1	23.4		ug/L		117	70 - 130
Chlorobenzene	20.1	22.9		ug/L		114	70 - 130
Toluene	20.2	22.7		ug/L		112	70 - 130
Trichloroethene (TCE)	20.2	22.3		ug/L		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 130
Toluene-d8 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130

Lab Sample ID: 885-11304-1 DU

Matrix: Air

Analysis Batch: 12295

Client Sample ID: SVE-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,1,1-Trichloroethane	ND		ND		ug/L		NC	20
1,1,1,2,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,1,2-Trichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethene	ND		ND		ug/L		NC	20
1,1-Dichloropropene	ND		ND		ug/L		NC	20
1,2,3-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,3-Trichloropropane	ND		ND		ug/L		NC	20
1,2,4-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,4-Trimethylbenzene	ND		ND		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	ND		ND		ug/L		NC	20
1,2-Dibromoethane (EDB)	ND		ND		ug/L		NC	20
1,2-Dichlorobenzene	ND		ND		ug/L		NC	20
1,2-Dichloroethane (EDC)	ND		ND		ug/L		NC	20
1,2-Dichloropropane	ND		ND		ug/L		NC	20
1,3,5-Trimethylbenzene	ND		ND		ug/L		NC	20
1,3-Dichlorobenzene	ND		ND		ug/L		NC	20
1,3-Dichloropropane	ND		ND		ug/L		NC	20
1,4-Dichlorobenzene	ND		ND		ug/L		NC	20
1-Methylnaphthalene	ND		ND		ug/L		NC	20

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QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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

Lab Sample ID: 885-11304-1 DU
Matrix: Air
Analysis Batch: 12295

Client Sample ID: SVE-1
Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
2,2-Dichloropropane	ND		ND		ug/L		NC	20
2-Butanone	ND		ND		ug/L		NC	20
2-Chlorotoluene	ND		ND		ug/L		NC	20
2-Hexanone	ND		ND		ug/L		NC	20
2-Methylnaphthalene	ND		ND		ug/L		NC	20
4-Chlorotoluene	ND		ND		ug/L		NC	20
4-Isopropyltoluene	ND		ND		ug/L		NC	20
4-Methyl-2-pentanone	ND		ND		ug/L		NC	20
Acetone	ND		ND		ug/L		NC	20
Benzene	3.2		3.24		ug/L		0.2	20
Bromobenzene	ND		ND		ug/L		NC	20
Bromodichloromethane	ND		ND		ug/L		NC	20
Dibromochloromethane	ND		ND		ug/L		NC	20
Bromoform	ND		ND		ug/L		NC	20
Bromomethane	ND		ND		ug/L		NC	20
Carbon disulfide	ND		ND		ug/L		NC	20
Carbon tetrachloride	ND		ND		ug/L		NC	20
Chlorobenzene	ND		ND		ug/L		NC	20
Chloroethane	ND		ND		ug/L		NC	20
Chloroform	ND		ND		ug/L		NC	20
Chloromethane	ND		ND		ug/L		NC	20
cis-1,2-Dichloroethene	ND		ND		ug/L		NC	20
cis-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Dibromomethane	ND		ND		ug/L		NC	20
Dichlorodifluoromethane	ND		ND		ug/L		NC	20
Ethylbenzene	ND		ND		ug/L		NC	20
Hexachlorobutadiene	ND		ND		ug/L		NC	20
Isopropylbenzene	ND		ND		ug/L		NC	20
Methyl-tert-butyl Ether (MTBE)	ND		ND		ug/L		NC	20
Methylene Chloride	ND		ND		ug/L		NC	20
n-Butylbenzene	ND		ND		ug/L		NC	20
N-Propylbenzene	ND		ND		ug/L		NC	20
Naphthalene	ND		ND		ug/L		NC	20
sec-Butylbenzene	ND		ND		ug/L		NC	20
Styrene	ND		ND		ug/L		NC	20
tert-Butylbenzene	ND		ND		ug/L		NC	20
Tetrachloroethene (PCE)	ND		ND		ug/L		NC	20
Toluene	8.1		7.38		ug/L		10	20
trans-1,2-Dichloroethene	ND		ND		ug/L		NC	20
trans-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Trichloroethene (TCE)	ND		ND		ug/L		NC	20
Trichlorofluoromethane	ND		ND		ug/L		NC	20
Vinyl chloride	ND		ND		ug/L		NC	20
Xylenes, Total	6.6		5.37	F5	ug/L		21	20
DU DU								
Surrogate	%Recovery	Qualifier	Limits					
1,2-Dichloroethane-d4 (Surr)	85		70 - 130					
Toluene-d8 (Surr)	110		70 - 130					

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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

Lab Sample ID: 885-11304-1 DU
Matrix: Air
Analysis Batch: 12295

Client Sample ID: SVE-1
Prep Type: Total/NA

	DU	DU	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	100		70 - 130

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

QC Association Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

GC/MS VOA

Analysis Batch: 12295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11304-1	SVE-1	Total/NA	Air	8260B	
MB 885-12295/1006	Method Blank	Total/NA	Air	8260B	
MB 885-12295/6	Method Blank	Total/NA	Air	8260B	
STOBLK 885-12295/49	Method Blank	Total/NA	Air	8260B	
LCS 885-12295/5	Lab Control Sample	Total/NA	Air	8260B	
885-11304-1 DU	SVE-1	Total/NA	Air	8260B	

Analysis Batch: 12775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-11304-1	SVE-1	Total/NA	Air	8015M/D	
MB 885-12775/4	Method Blank	Total/NA	Air	8015M/D	
LCS 885-12775/3	Lab Control Sample	Total/NA	Air	8015M/D	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

Client Sample ID: SVE-1
Date Collected: 09/05/24 14:45
Date Received: 09/06/24 08:00

Lab Sample ID: 885-11304-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015M/D		20	12775	CM	EET ALB	09/20/24 11:50
Total/NA	Analysis	8260B		20	12295	CM	EET ALB	09/16/24 14:49

Laboratory References:

= , 1120 South 27th Street, Billings, MT 59101, TEL (406)252-6325

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

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
8015M/D		Air	Gasoline Range Organics [C6 - C10]
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

Laboratory: Eurofins Albuquerque (Continued)

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

Authority	Program	Identification Number	Expiration Date
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
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total
Oregon	NELAP	NM100001	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
8015M/D		Air	Gasoline Range Organics [C6 - C10]
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-11304-1

Laboratory: Eurofins Albuquerque (Continued)

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

Authority	Program	Identification Number	Expiration Date
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
8260B		Air	1-Methylnaphthalene
8260B		Air	2,2-Dichloropropane
8260B		Air	2-Butanone
8260B		Air	2-Chlorotoluene
8260B		Air	2-Hexanone
8260B		Air	2-Methylnaphthalene
8260B		Air	4-Chlorotoluene
8260B		Air	4-Isopropyltoluene
8260B		Air	4-Methyl-2-pentanone
8260B		Air	Acetone
8260B		Air	Benzene
8260B		Air	Bromobenzene
8260B		Air	Bromodichloromethane
8260B		Air	Bromoform
8260B		Air	Bromomethane
8260B		Air	Carbon disulfide
8260B		Air	Carbon tetrachloride
8260B		Air	Chlorobenzene
8260B		Air	Chloroethane
8260B		Air	Chloroform
8260B		Air	Chloromethane
8260B		Air	cis-1,2-Dichloroethene
8260B		Air	cis-1,3-Dichloropropene
8260B		Air	Dibromochloromethane
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Eurofins Albuquerque



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ANALYTICAL SUMMARY REPORT

September 24, 2024

Hall Environmental

4901 Hawkins St NE Ste D

Albuquerque, NM 87109-4372

Work Order: B24090800

Quote ID: B15626

Project Name: Standard 1, 88501698

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 9/10/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24090800-001	SVE-1 (885-11304-1)	09/05/24 14:45	09/10/24	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond./1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



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LABORATORY ANALYTICAL REPORT
Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Standard 1, 88501698
Lab ID: B24090800-001
Client Sample ID: SVE-1 (885-11304-1)

Report Date: 09/24/24
Collection Date: 09/05/24 14:45
Date Received: 09/10/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	22.07	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Nitrogen	77.67	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Carbon Dioxide	0.21	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Hexanes plus	0.05	Mol %		0.01		GPA 2261-95	09/18/24 12:28 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
Hexanes plus	0.021	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
GPM Total	0.021	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
GPM Pentanes plus	0.021	gpm		0.001		GPA 2261-95	09/18/24 12:28 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	2			1		GPA 2261-95	09/18/24 12:28 / jrj
Net BTU per cu ft @ std cond. (LHV)	2			1		GPA 2261-95	09/18/24 12:28 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-95	09/18/24 12:28 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	09/18/24 12:28 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	09/18/24 12:28 / jrj
Air, %	100.82			0.01		GPA 2261-95	09/18/24 12:28 / jrj
- The analysis was not corrected for air.							

COMMENTS

-
-
- 09/18/24 12:28 / jrj
- BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior.
 - GPM = gallons of liquid at standard conditions per 1000 cu. ft. of moisture free gas @ standard conditions.
 - To convert BTU to a water-saturated basis @ standard conditions, multiply by 0.9825.
 - Standard conditions: 60 F & 14.73 psi on a dry basis

Report Definitions:	RL - Analyte Reporting Limit QCL - Quality Control Limit	MCL - Maximum Contaminant Level ND - Not detected at the Reporting Limit (RL)
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 Gillette, WY **307.686.7175** • Helena, MT **406.442.0711**

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental

Work Order: B24090800

Report Date: 09/24/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	GPA 2261-95								Batch: R429106	
Lab ID:	LCS091824	11 Laboratory Control Sample			Run: GCNGA-B_240918A				09/18/24 02:55	
Oxygen		0.63	Mol %	0.01	126	70	130			
Nitrogen		6.09	Mol %	0.01	101	70	130			
Carbon Dioxide		0.99	Mol %	0.01	100	70	130			
Methane		74.6	Mol %	0.01	100	70	130			
Ethane		6.05	Mol %	0.01	101	70	130			
Propane		5.08	Mol %	0.01	103	70	130			
Isobutane		1.71	Mol %	0.01	85	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		1.02	Mol %	0.01	102	70	130			
n-Pentane		1.00	Mol %	0.01	100	70	130			
Hexanes plus		0.79	Mol %	0.01	99	70	130			
Lab ID:	B24090800-001ADUP	12 Sample Duplicate			Run: GCNGA-B_240918A				09/18/24 03:44	
Oxygen		22.1	Mol %	0.01				0.1	20	
Nitrogen		77.6	Mol %	0.01				0.1	20	
Carbon Dioxide		0.21	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		0.06	Mol %	0.01				18	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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Work Order Receipt Checklist

Hall Environmental

B24090800

Login completed by: Danielle N. Harris

Date Received: 9/10/2024

Reviewed by: cindy

Received by: KLP

Reviewed Date: 9/16/2024

Carrier name: FedEx NDA

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☒	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☒	Not Applicable ☐
Container/Temp Blank temperature:	20.3°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☒

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-3976

Chain of Custody Record

 eurofins

Environment Testing

[illegible]

Chain-of-Custody Record

Client: Hilcorp

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Page 26 of 27

9/24/2024

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Standard 1

Project #:

Project Manager:

Mitch Killough

Sampler: Brandon Sinclair

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (Including CF): $1.5 - 0 = 1.5$ ($^{\circ}\text{C}$)

Container	Preservative	HEAL No.

Type and #

2 Tedlor

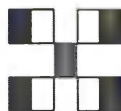
Received by: / Via: , Date , Time

9/5/2011 37

Received by: _____	Via: _____	Date _____	Time _____
--------------------	------------	------------	------------



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



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque,

Tel. 505-345-3975 Fax 505-34



Analysis Required 885-11304 COC

[illegible]

Remarks:

Received by: / Via: , Date , Time

Received by: _____	Via: _____	Date _____	Time _____
--------------------	------------	------------	------------



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

Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-11304-1

Login Number: 11304

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



APPENDIX D

Groundwater Laboratory Analytical Reports



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/11/2024 4:13:36 PM

JOB DESCRIPTION

Standard #1

JOB NUMBER

885-12815-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

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
10/11/2024 4:13:36 PM

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

Client: Hilcorp Energy
Project/Site: Standard #1

Laboratory Job ID: 885-12815-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Standard #1

Job ID: 885-12815-1

Job ID: 885-12815-1Eurofins Albuquerque

Job Narrative
885-12815-1

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 9/28/2024 6:20 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 1.1°C.

GC/MS VOA

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

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-8
Date Collected: 09/23/24 16:25
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-1
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			10/04/24 22:39	1	
Ethylbenzene	ND		1.0	ug/L			10/04/24 22:39	1	
Toluene	ND		1.0	ug/L			10/04/24 22:39	1	
Xylenes, Total	ND		1.5	ug/L			10/04/24 22:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	95		70 - 130				10/04/24 22:39	1	
4-Bromofluorobenzene (Surr)	96		70 - 130				10/04/24 22:39	1	
Dibromofluoromethane (Surr)	102		70 - 130				10/04/24 22:39	1	
Toluene-d8 (Surr)	95		70 - 130				10/04/24 22:39	1	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-11
Date Collected: 09/23/24 14:00
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-2
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			10/04/24 23:03	1	
Ethylbenzene	ND		1.0	ug/L			10/04/24 23:03	1	
Toluene	ND		1.0	ug/L			10/04/24 23:03	1	
Xylenes, Total	ND		1.5	ug/L			10/04/24 23:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				10/04/24 23:03	1	
4-Bromofluorobenzene (Surr)	97		70 - 130				10/04/24 23:03	1	
Dibromofluoromethane (Surr)	100		70 - 130				10/04/24 23:03	1	
Toluene-d8 (Surr)	96		70 - 130				10/04/24 23:03	1	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-12
Date Collected: 09/23/24 13:10
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	15		1.0	ug/L			10/04/24 23:28	1	
Ethylbenzene	ND		1.0	ug/L			10/04/24 23:28	1	
Toluene	ND		1.0	ug/L			10/04/24 23:28	1	
Xylenes, Total	ND		1.5	ug/L			10/04/24 23:28	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	90		70 - 130				10/04/24 23:28	1	
4-Bromofluorobenzene (Surr)	106		70 - 130				10/04/24 23:28	1	
Dibromofluoromethane (Surr)	99		70 - 130				10/04/24 23:28	1	
Toluene-d8 (Surr)	99		70 - 130				10/04/24 23:28	1	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-15
Date Collected: 09/25/24 13:00
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-4
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	20000		500	ug/L			10/05/24 01:30	500	
Ethylbenzene	ND		500	ug/L			10/05/24 01:30	500	
Toluene	6500		500	ug/L			10/05/24 01:30	500	
Xylenes, Total	2700		750	ug/L			10/05/24 01:30	500	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				10/05/24 01:30	500	
4-Bromofluorobenzene (Surr)	99		70 - 130				10/05/24 01:30	500	
Dibromofluoromethane (Surr)	99		70 - 130				10/05/24 01:30	500	
Toluene-d8 (Surr)	96		70 - 130				10/05/24 01:30	500	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-16
Date Collected: 09/25/24 17:00
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-5
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	130		20	ug/L			10/05/24 01:54	20	
Ethylbenzene	280		20	ug/L			10/05/24 01:54	20	
Toluene	ND		20	ug/L			10/05/24 01:54	20	
Xylenes, Total	85		30	ug/L			10/05/24 01:54	20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				10/05/24 01:54	20	
4-Bromofluorobenzene (Surr)	108		70 - 130				10/05/24 01:54	20	
Dibromofluoromethane (Surr)	98		70 - 130				10/05/24 01:54	20	
Toluene-d8 (Surr)	101		70 - 130				10/05/24 01:54	20	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-17
Date Collected: 09/25/24 16:15
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-6
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			10/04/24 23:52	1	
Ethylbenzene	ND		1.0	ug/L			10/04/24 23:52	1	
Toluene	ND		1.0	ug/L			10/04/24 23:52	1	
Xylenes, Total	ND		1.5	ug/L			10/04/24 23:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	95		70 - 130				10/04/24 23:52	1	
4-Bromofluorobenzene (Surr)	97		70 - 130				10/04/24 23:52	1	
Dibromofluoromethane (Surr)	101		70 - 130				10/04/24 23:52	1	
Toluene-d8 (Surr)	97		70 - 130				10/04/24 23:52	1	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-18
Date Collected: 09/23/24 15:40
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-7
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	84		20	ug/L			10/05/24 02:43	20	
Ethylbenzene	ND		20	ug/L			10/05/24 02:43	20	
Toluene	ND		20	ug/L			10/05/24 02:43	20	
Xylenes, Total	ND		30	ug/L			10/05/24 02:43	20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				10/05/24 02:43	20	
4-Bromofluorobenzene (Surr)	103		70 - 130				10/05/24 02:43	20	
Dibromofluoromethane (Surr)	103		70 - 130				10/05/24 02:43	20	
Toluene-d8 (Surr)	98		70 - 130				10/05/24 02:43	20	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-19
Date Collected: 09/25/24 17:45
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-8
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	6500		200	ug/L			10/05/24 03:07	200	
Ethylbenzene	1100		200	ug/L			10/05/24 03:07	200	
Toluene	13000		200	ug/L			10/05/24 03:07	200	
Xylenes, Total	8700		300	ug/L			10/05/24 03:07	200	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				10/05/24 03:07	200	
4-Bromofluorobenzene (Surr)	103		70 - 130				10/05/24 03:07	200	
Dibromofluoromethane (Surr)	98		70 - 130				10/05/24 03:07	200	
Toluene-d8 (Surr)	100		70 - 130				10/05/24 03:07	200	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-22
Date Collected: 09/23/24 14:45
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-9
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			10/05/24 00:17	1
Ethylbenzene	ND		1.0	ug/L			10/05/24 00:17	1
Toluene	ND		1.0	ug/L			10/05/24 00:17	1
Xylenes, Total	ND		1.5	ug/L			10/05/24 00:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				10/05/24 00:17	1
4-Bromofluorobenzene (Surr)	96		70 - 130				10/05/24 00:17	1
Dibromofluoromethane (Surr)	99		70 - 130				10/05/24 00:17	1
Toluene-d8 (Surr)	94		70 - 130				10/05/24 00:17	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-23
Date Collected: 09/25/24 14:40
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-10
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			10/05/24 00:41	1	
Ethylbenzene	ND		1.0	ug/L			10/05/24 00:41	1	
Toluene	ND		1.0	ug/L			10/05/24 00:41	1	
Xylenes, Total	ND		1.5	ug/L			10/05/24 00:41	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	93		70 - 130				10/05/24 00:41	1	
4-Bromofluorobenzene (Surr)	96		70 - 130				10/05/24 00:41	1	
Dibromofluoromethane (Surr)	101		70 - 130				10/05/24 00:41	1	
Toluene-d8 (Surr)	97		70 - 130				10/05/24 00:41	1	

Client Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-26
Date Collected: 09/25/24 15:30
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-11
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			10/05/24 01:05	1	
Ethylbenzene	ND		1.0	ug/L			10/05/24 01:05	1	
Toluene	ND		1.0	ug/L			10/05/24 01:05	1	
Xylenes, Total	ND		1.5	ug/L			10/05/24 01:05	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	94		70 - 130				10/05/24 01:05	1	
4-Bromofluorobenzene (Surr)	97		70 - 130				10/05/24 01:05	1	
Dibromofluoromethane (Surr)	101		70 - 130				10/05/24 01:05	1	
Toluene-d8 (Surr)	98		70 - 130				10/05/24 01:05	1	

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

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

Lab Sample ID: MB 885-13709/6
Matrix: Water
Analysis Batch: 13709

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			10/04/24 17:46	1
Ethylbenzene	ND		1.0	ug/L			10/04/24 17:46	1
Toluene	ND		1.0	ug/L			10/04/24 17:46	1
Xylenes, Total	ND		1.5	ug/L			10/04/24 17:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				10/04/24 17:46	1
4-Bromofluorobenzene (Surr)	98		70 - 130				10/04/24 17:46	1
Dibromofluoromethane (Surr)	97		70 - 130				10/04/24 17:46	1
Toluene-d8 (Surr)	97		70 - 130				10/04/24 17:46	1

Lab Sample ID: LCS 885-13709/5
Matrix: Water
Analysis Batch: 13709

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	21.9		ug/L		109	70 - 130
Toluene	20.2	20.2		ug/L		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	91		70 - 130				
4-Bromofluorobenzene (Surr)	98		70 - 130				
Dibromofluoromethane (Surr)	97		70 - 130				
Toluene-d8 (Surr)	97		70 - 130				

QC Association Summary

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

GC/MS VOA

Analysis Batch: 13709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-12815-1	MW-8	Total/NA	Water	8260B	
885-12815-2	MW-11	Total/NA	Water	8260B	
885-12815-3	MW-12	Total/NA	Water	8260B	
885-12815-4	MW-15	Total/NA	Water	8260B	
885-12815-5	MW-16	Total/NA	Water	8260B	
885-12815-6	MW-17	Total/NA	Water	8260B	
885-12815-7	MW-18	Total/NA	Water	8260B	
885-12815-8	MW-19	Total/NA	Water	8260B	
885-12815-9	MW-22	Total/NA	Water	8260B	
885-12815-10	MW-23	Total/NA	Water	8260B	
885-12815-11	MW-26	Total/NA	Water	8260B	
MB 885-13709/6	Method Blank	Total/NA	Water	8260B	
LCS 885-13709/5	Lab Control Sample	Total/NA	Water	8260B	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-8
Date Collected: 09/23/24 16:25
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13709	CM	EET ALB	10/04/24 22:39

Client Sample ID: MW-11
Date Collected: 09/23/24 14:00
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13709	CM	EET ALB	10/04/24 23:03

Client Sample ID: MW-12
Date Collected: 09/23/24 13:10
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13709	CM	EET ALB	10/04/24 23:28

Client Sample ID: MW-15
Date Collected: 09/25/24 13:00
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		500	13709	CM	EET ALB	10/05/24 01:30

Client Sample ID: MW-16
Date Collected: 09/25/24 17:00
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		20	13709	CM	EET ALB	10/05/24 01:54

Client Sample ID: MW-17
Date Collected: 09/25/24 16:15
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13709	CM	EET ALB	10/04/24 23:52

Client Sample ID: MW-18
Date Collected: 09/23/24 15:40
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		20	13709	CM	EET ALB	10/05/24 02:43

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

Client Sample ID: MW-19
Date Collected: 09/25/24 17:45
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		200	13709	CM	EET ALB	10/05/24 03:07

Client Sample ID: MW-22
Date Collected: 09/23/24 14:45
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13709	CM	EET ALB	10/05/24 00:17

Client Sample ID: MW-23
Date Collected: 09/25/24 14:40
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13709	CM	EET ALB	10/05/24 00:41

Client Sample ID: MW-26
Date Collected: 09/25/24 15:30
Date Received: 09/28/24 06:20

Lab Sample ID: 885-12815-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	13709	CM	EET ALB	10/05/24 01:05

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-12815-1

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
8260B		Water	Benzene
8260B		Water	Ethylbenzene
8260B		Water	Toluene
8260B		Water	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25

Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-12815-1

Login Number: 12815

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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



APPENDIX E

Correspondence

From: [Velez, Nelson, EMNRD](#)
To: [Stuart Hyde](#)
Cc: [Hannah Mishriki](#); [Mitch Killough](#)
Subject: Re: [EXTERNAL] NCS1735235018 - Standard #1 Q3 Report Extension Request
Date: Thursday, October 10, 2024 11:44:35 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.jpg](#)
[Outlook-li5kwrne.png](#)

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Good morning Stuart,

Thanks for the correspondence. Your 30-day time extension is approved. Remediation Due date has been updated to November 12, 2024.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Stuart Hyde <shyde@ensolum.com>
Sent: Thursday, October 10, 2024 11:21 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Hannah Mishriki <hmishriki@ensolum.com>; Mitch Killough <mkillough@hilcorp.com>
Subject: [EXTERNAL] NCS1735235018 - Standard #1 Q3 Report Extension Request

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Nelson,

We are waiting on final laboratory reports for the Standard #1 site and would like to request a 30-day extension to the DPE system reporting deadline of October 15, 2024. Please let me know if you have any questions regarding the site or this request. Thanks!



Stuart Hyde, PG

(Licensed in WA/TX)

Senior Managing Geologist

970-903-1607

[Ensolum, LLC](#)



"If you want to go fast, go alone. If you want to go far, go together." – African Proverb

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 394976

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 394976
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Created By	Condition	Condition Date
nvez	1. Continue O&M & sampling as stated in report. 2. Submit next quarterly report by January 15, 2025.	10/25/2024