



January 9, 2025

New Mexico Oil Conservation Division

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

Re: Fourth 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 *Fourth Quarter 2024 - Remediation System Operation and Monitoring Report* summarizing remediation system performance during the fourth 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 September 23, 2024 through December 19, 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 fourth 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.

FOURTH 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 fourth quarter of 2024. Field forms completed during operations and maintenance (O&M) visits are presented as Appendix A.

Between September 23, and December 19, 2024, the DPE system operated for 1,722 hours for a runtime efficiency of 82%. Further details regarding system downtime are provided in the *Discussions and Recommendations* section, below. Appendix B presents photographs of the runtime meter for calculating the fourth quarter of 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 being collected every other month during the second through fourth quarters of system operation. An influent vapor sample was collected on November 20, 2024. The sample was 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 report is 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, 11,631 pounds (5.8 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 the startup of the system on January 2, 2024, through December 19, 2024, approximately 126,052 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 December 9 and December 10, 2024, as part of the fourth 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 fourth quarter 2024 quarterly monitoring event (Figure 4).

During the fourth quarter 2024 gauging event, a trace (less than 0.01 feet) of PSH was observed in monitoring wells MW01 through MW06, MW10, MW14, and MW15.

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, MW16, MW18, and MW19. All four aforementioned wells also contained BTEX concentrations exceeding the NMWQCC standards during the third quarter 2024 monitoring event. Monitoring well MW15, which contained BTEX concentrations that exceeded the NMWQCC standards during the third quarter 2024 monitoring event, could not be sampled during the fourth 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 fourth quarter 2024 due to scaling within the manifold and associated pitot tubes not allowing for accurate data collection using a magnehelic gauge. The scaling from the manifold and pitot tubes was removed during the fourth quarter of 2024 and will continue to be removed on an as-needed basis throughout system operation.

On October 28, 2024, the float assembly that controls the liquid transfer pump on and off status failed, causing the knockout tank to fill up and trigger a high-level alarm condition. Replacement floats were purchased and installed upon arrival. System operation resumed on November 6, 2024. A copy of the NMOCD shutdown notification is provided as Appendix E.

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



Stuart Hyde, LG (licensed in WA & TX)
Senior Managing Geologist
(970) 903-1607
shyde@ensolum.com



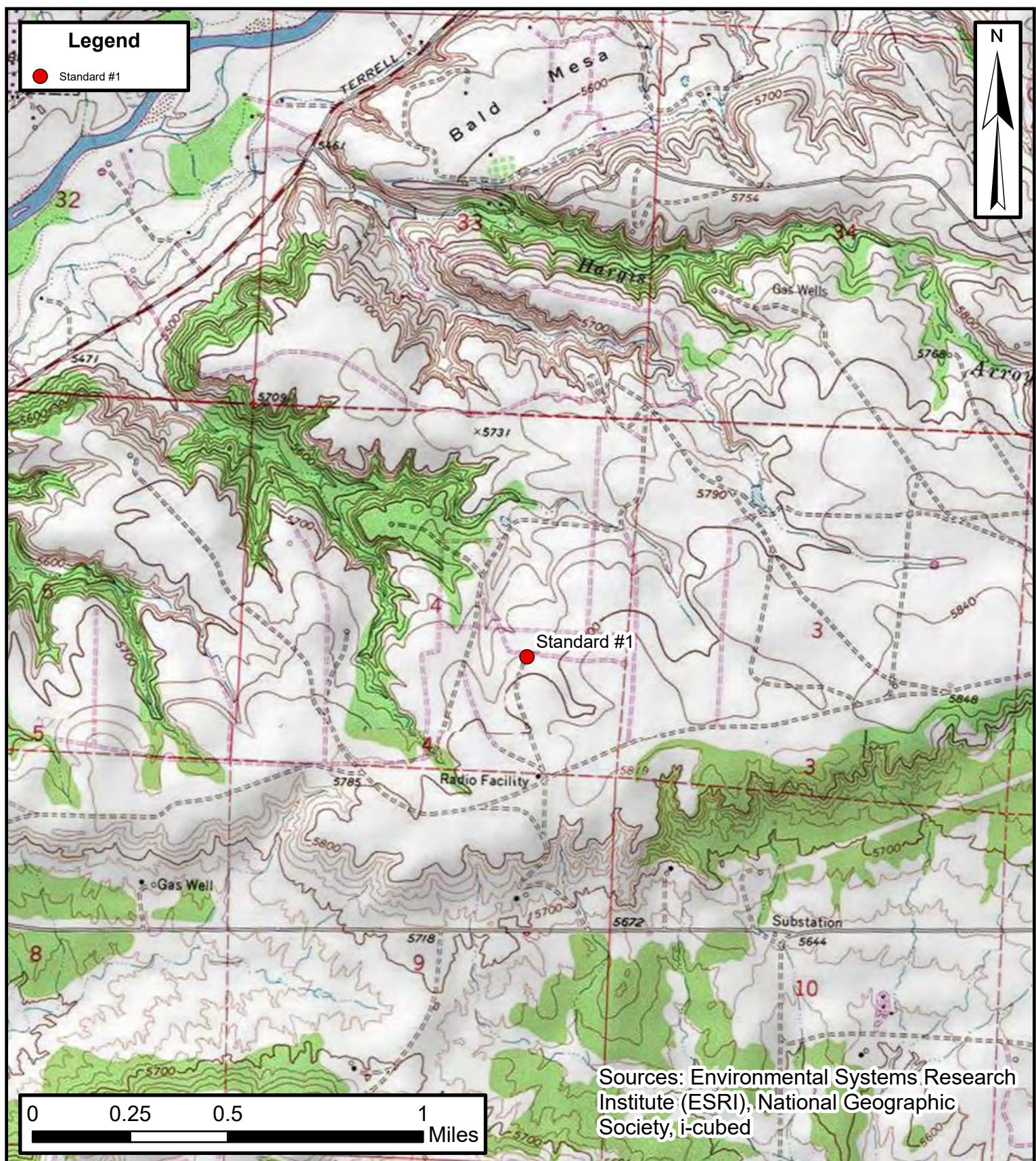
Daniel R. Moir, PG (licensed in WY & TX)
Senior Managing Geologist
(303) 887-2946
dmoir@ensolum.com

Attachments:

- | | |
|------------|---|
| Figure 1 | Site Location Map |
| Figure 2 | Site Features |
| Figure 3 | Dual Phase Extraction System Layout |
| Figure 4 | Groundwater Elevation Map – Q4 2024 |
| Figure 5 | Groundwater Analytical Results – Q4 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

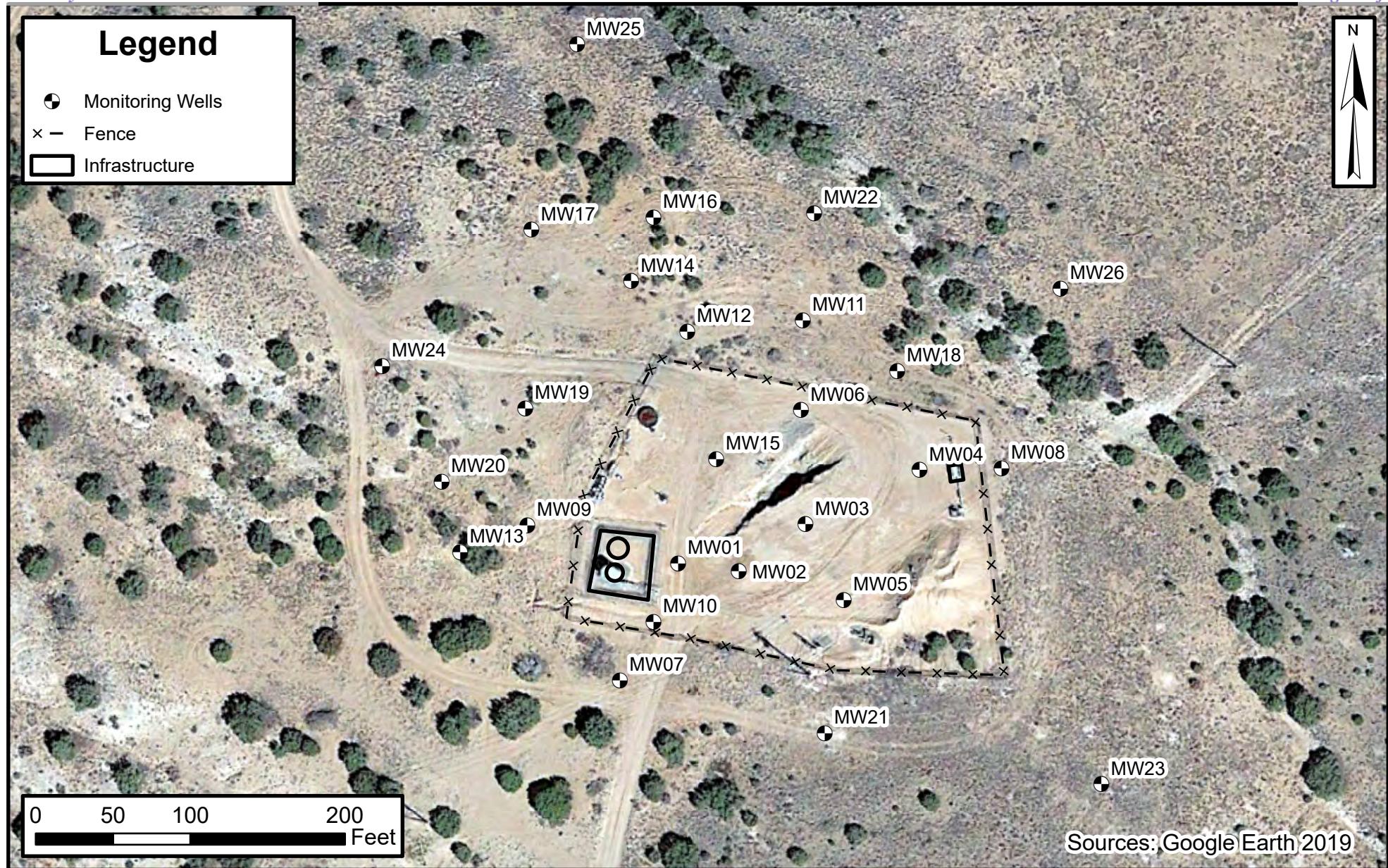
Standard #1
Hilcorp Energy Company

36.75285, -108.099744
San Juan County, New Mexico



Environmental, Engineering and
Hydrogeologic Consultants

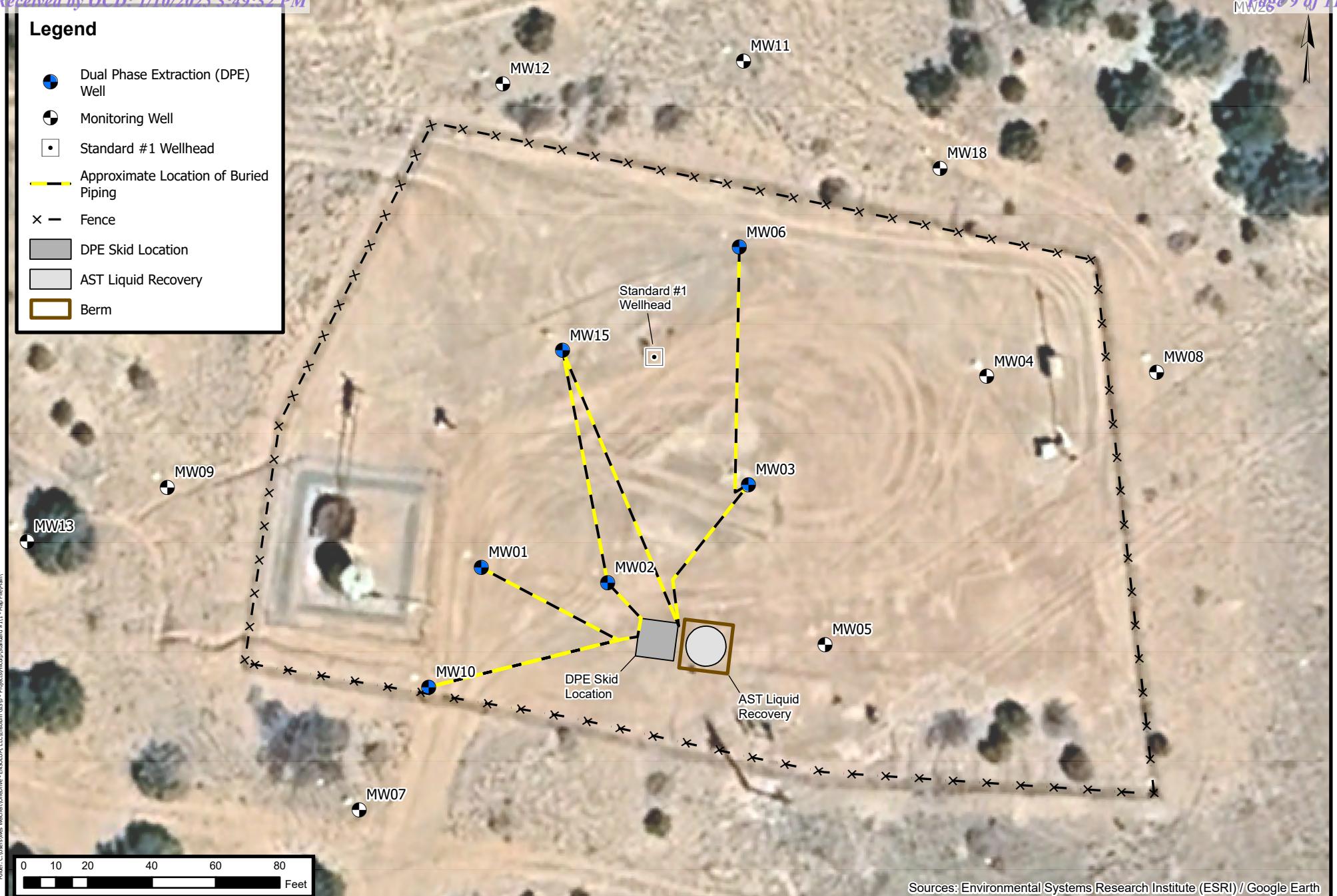
FIGURE
1

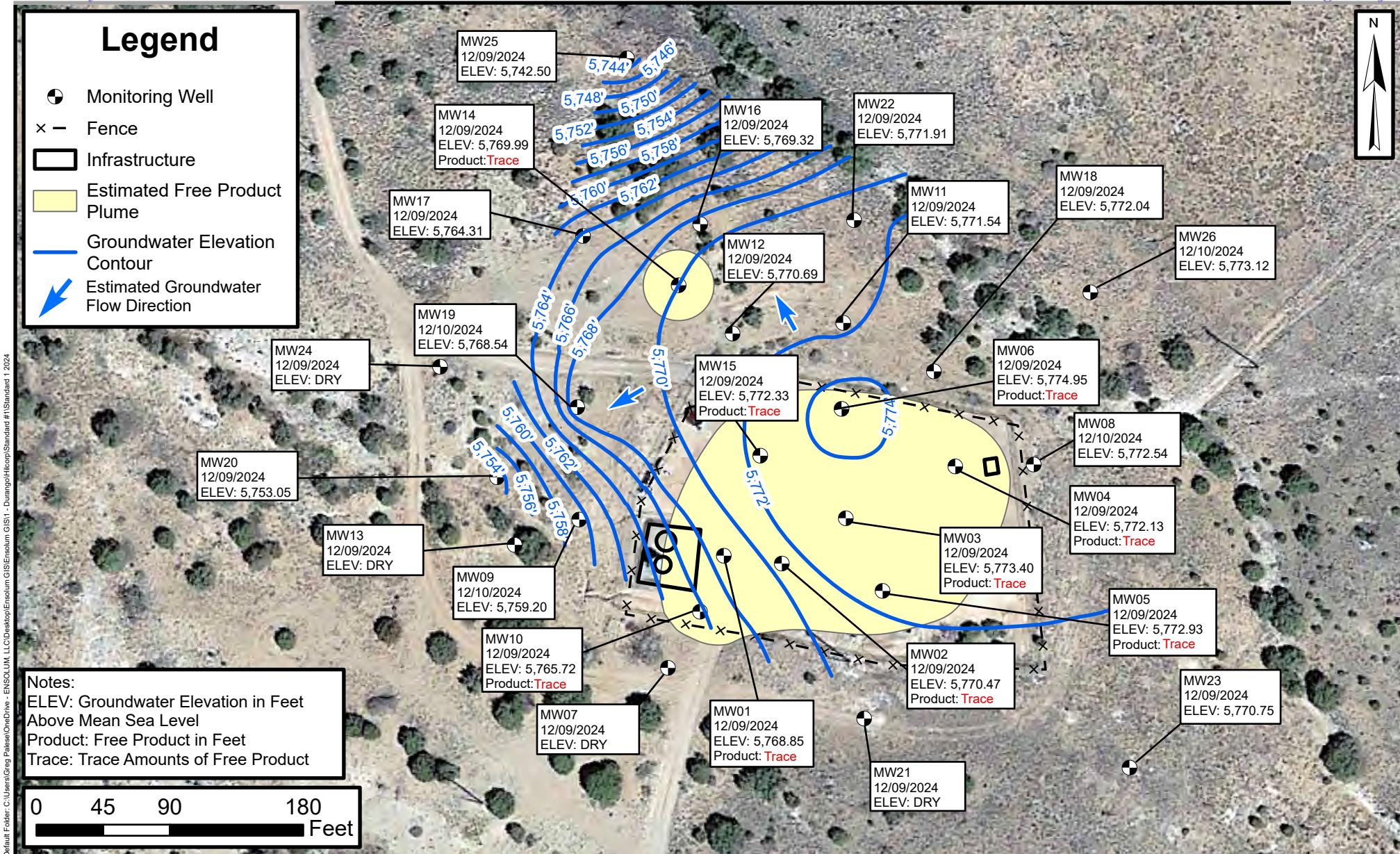


Site Features
Standard #1
Hilcorp Energy Company

36.75285, -108.099744
San Juan County, New Mexico

**FIGURE
2**





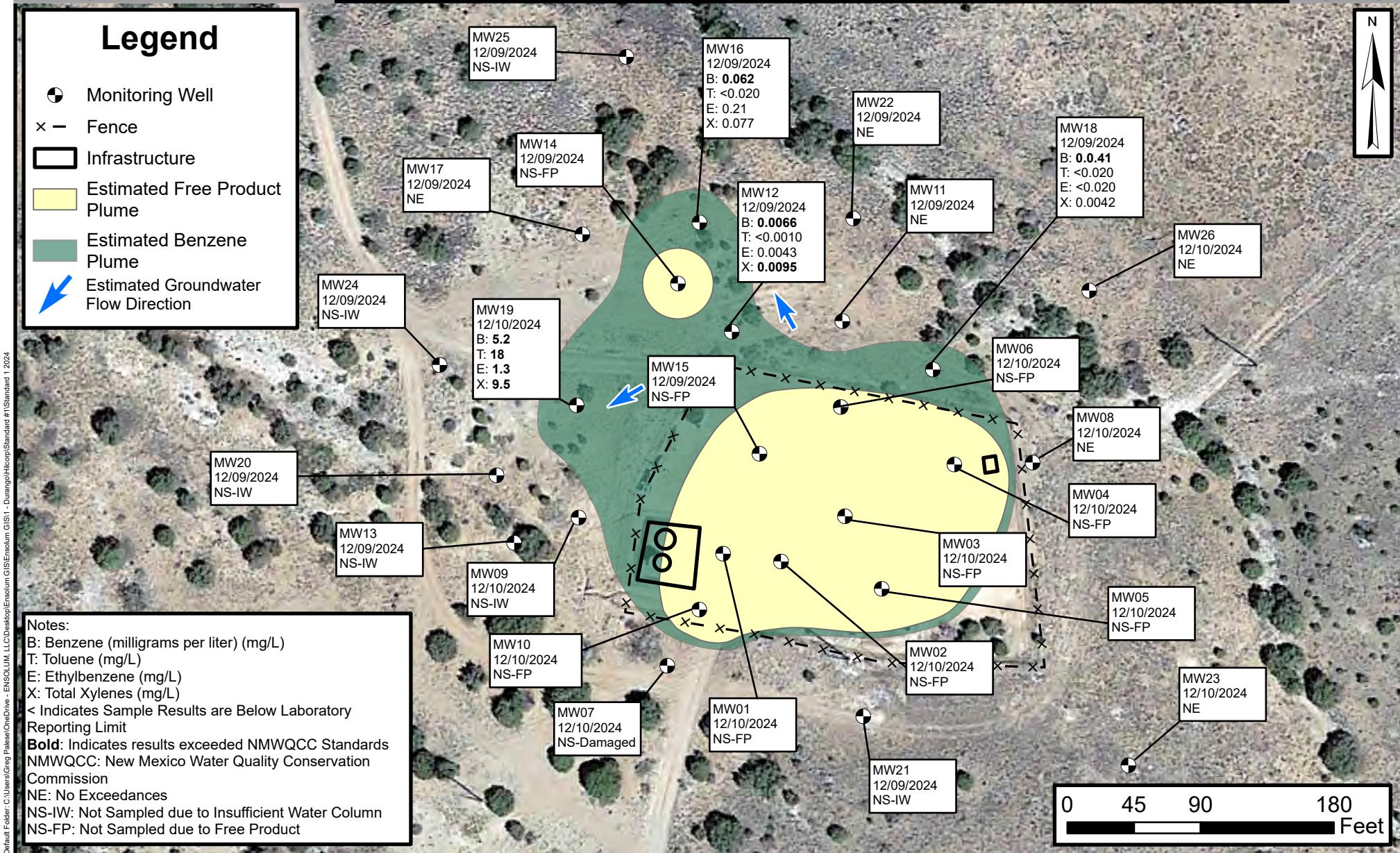
Groundwater Elevation Map - Q4 2024

Standard #1
Hilcorp Energy Company

36.75285, -108.099744
San Juan County, New Mexico



FIGURE
4



Groundwater Analytical Results - Q4 2024

Standard #1
Hilcorp Energy Company

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%	
6/27/2024	4,167	3,649	100%	98%	
9/23/2024	6,278	4,733	99%	99%	
10/10/2024	6,640	4,930	89%	98%	
10/24/2024	6,972	5,096	99%	98%	
11/11/2024	7,193	5,084	51%	95%	Downtime due to scaling
11/20/2024	7,411	5,210	101%	96%	
12/10/2024	7,784	5,246	78%	94%	Downtime due to frozen lines
12/19/2024	7,999	5,031	100%	95%	
			4th Qtr 2024 Run Time Hours	1,722	
			4th Qtr 2024 Run Time %	82%	

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 (acf m)	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
	10/10/2024	101	1.50	428	148	16.8	8.23	20.5	0.13
	10/24/2024	114	1.00	350	121	16.8	8.23	20.9	0.14
	11/11/2024	74	1.50	428	168	15.0	7.37	20.9	0.14
	11/20/2024	79	1.50	428	162	15.5	7.61	20.9	0.08
	12/10/2024	72	2.75	580	296	10.5	5.16	20.9	0.12
	12/19/2024	73	2.50	553	282	10.5	5.16	--	--
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
	10/10/2024	187	0.51	62.4	40.4	5.3	2.58	19.7	0.23
	10/24/2024	150	0.72	74.2	46.1	6.3	3.07	20.5	0.15
	11/11/2024	201	0.62	68.8	32.4	12.0	5.89	20.9	0.25
	11/20/2024	163	0.67	71.6	33.6	12.0	5.89	20.9	0.14
	12/10/2024	197	0.66	71.0	33.4	12.0	5.89	20.9	0.19
	12/19/2024	38	--	--	--	7.5	3.68	--	--
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



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 (acf m)	Flow Rate (scfm) ⁽¹⁾	Vacuum (IHg)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
MW02	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
	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
	10/10/2024	79	Gauge Broken	--	--	10.8	5.28	20.6	0.16
	10/24/2024	82	Gauge Broken	--	--	15.3	7.49	20.6	0.12
	11/11/2024	66	Gauge Broken	--	--	13.0	6.39	20.9	0.18
	11/20/2024	83	0.38	53.9	23.9	13.0	6.39	20.9	0.10
	12/10/2024	84	0.12	30.3	13.4	13.0	6.39	20.9	0.16
	12/19/2024	74	Gauge Broken	--	--	8.0	3.93	--	--
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
	10/10/2024	392	0.22	41.0	21.4	10.0	4.91	20.1	0.30
	10/24/2024	363	0.14	32.7	15.6	11.8	5.77	20.0	0.30
	11/11/2024	117	0.17	36.0	15.3	13.8	6.75	20.9	0.26
	11/20/2024	157	0.04	17.5	7.4	13.8	6.75	20.9	0.18
	12/10/2024	123	0.11	29.0	12.5	13.5	6.63	20.9	0.14
	12/19/2024	25	0.07	23.1	13.6	7.5	3.68	--	--
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



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 (acf m)	Flow Rate (scfm) ⁽¹⁾	Vacuum (IHg)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
MW06	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
	10/10/2024	36	0.04	17.5	9.9	8.3	4.05	20.7	0.14
	10/24/2024	36	0.06	21.4	11.9	8.8	4.30	20.1	0.27
	11/11/2024	66	0.04	17.5	7.5	13.5	6.63	20.9	0.20
	11/20/2024	62	0.04	17.5	7.5	13.5	6.63	20.9	0.16
	12/10/2024	70	0.19	38.1	16.4	13.5	6.63	20.9	0.16
	12/19/2024	25	0.25	43.7	24.0	9.0	4.42	--	--
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
	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
	10/10/2024	49	Gauge Broken	--	--	8.5	4.17	20.7	0.13
	10/24/2024	28	Gauge Broken	--	--	5.3	2.58	20.6	0.13
	11/11/2024	19	Gauge Broken	--	--	12.0	5.89	20.9	0.12
	11/20/2024	38	2.77	146	66.5	12.5	6.14	20.9	0.08
	12/10/2024	24	0.15	34	15.5	12.5	6.14	20.9	0.09
	12/19/2024	44	0.21	40	24.1	7.0	3.44	--	--
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
	10/10/2024	39	0.01	8.7	4.5	10.3	5.03	20.7	0.13
	10/24/2024	18	Gauge Broken	--	--	12.5	6.14	20.9	0.00
	11/11/2024	78	0.02	12.4	5.7	12.5	6.14	20.9	0.15
	11/20/2024	92	Gauge Broken	--	--	13.5	6.63	20.9	0.12
	12/10/2024	84	0.01	8.7	3.9	13.0	6.39	20.9	0.12



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 (acf m)	Flow Rate (scfm) ⁽¹⁾	Vacuum (IHG)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
MW15	12/19/2024	33	0.28	46.3	26.6	8.0	3.93	--	--

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: photionization detector

ppm: parts per million

acf m: 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
11/20/2024	79	8.2	44.0	3.1	43	1,300	21.34	0.12

Notes:

GRO: gasoline range organics

TVPH: total volatile petroleum hydrocarbons

µg/L: microgram per liter

%: percent

PID: photoionization detector

--: not sampled

ppm: parts per million

(1) PID reading is from 1/11/2024

(2) PID Reading is from 7/29/2024



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
11/20/2024	79	8.2	44.0	3.1	43	1,300
Average	367	13	24	3	22	2,267

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
11/20/2024	162	101,591,430	15,188,472	0.00345	0.0158	0.00155	0.0150	0.60
Average	0.0126		0.022		0.0030		0.021	2.17

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
11/20/2024	7,411	1,563	5.40	24.7	2.41	23.5	937	0.47
Total Mass Recovery to Date	60		120		17	122	11,631	5.8

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	
10/10/24 15:05	6,640	118,996	3,659	116,348	411:00:00	24,660	0.15	214	
10/24/24 11:23	6,972	122,790	3,794	120,142	332:18:00	19,938	0.19	274	
11/11/24 11:45	7,193	124,182	1,392	121,533	432:22:00	25,942	0.05	77	
11/20/24 14:04	7,411	125,918	1,737	123,270	218:19:00	13,099	0.13	191	
12/10/24 12:57	7,784	128,057	2,139	125,409	478:53:00	28,733	0.07	107	
12/19/24 13:33	7,999	128,700	643	126,052	216:36:00	12,996	0.05	71	

Notes:

bbl: barrel

in: inch

ft: feet

min: minute

gal: gallon

sec: second

gal/day: gallon per day

Dashed line indicated quarter change

gpm: gallon per minute

--: not applicable

hr: hour

Total Quantity of Liquid Removed:	126,052 Gal
	3,001 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	--	--	--	--
		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
		12/9/2024	Trace	20.23	Trace	5,768.85
MW02	5,789.36	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



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)
MW02		9/23/2024	Trace	19.68	Trace	5,769.68
		12/9/2024	Trace	18.89	Trace	5,770.47
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	--	--	--	--
		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
		12/9/2024	Trace	18.66	Trace	5,773.40
MW04	5,792.35	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
MW05	5,792.35	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



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)
MW04		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
		12/9/2024	Trace	20.22	Trace	5,772.13
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
		12/9/2024	Trace	19.67	Trace	5,772.93
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



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)
MW06		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
		12/9/2024	Trace	17.36	Trace	5,774.95
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
MW08	5,792.42	12/14/2023	--	--	--	--
		3/27/2024	--	--	--	--
		6/3/2024	--	DRY	--	DRY
		9/23/2024	--	DRY	--	DRY
		12/9/2024	--	DRY	--	DRY
		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



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)
MW08		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
MW09	5,786.16	12/10/2024	--	19.88	--	5,772.54
		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
MW10	5,789.30	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
		12/10/2024	--	26.96	--	5,759.20
		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



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)
MW10	5,789.30	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
		6/3/2024	--	DRY	--	DRY
		9/23/2024	Trace	26.48	Trace	5762.82
		12/9/2024	Trace	23.58	Trace	5765.72
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
		3/28/2024	--	17.08	--	5,770.91
		6/3/2024	--	17.05	--	5,770.94
		9/23/2024	--	16.70	--	5,771.29
		12/9/2024	--	16.45	--	5,771.54
MW12	5,789.57	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



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)
MW12	5,789.57	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
		3/28/2024	--	19.49	--	5,770.08
		6/3/2024	--	19.49	--	5,770.08
		9/23/2024	--	19.22	--	5,770.35
		12/9/2024	--	18.88	--	5,770.69
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
		3/28/2024	--	DRY	--	DRY
		6/3/2024	--	DRY	--	DRY
		9/25/2024	--	DRY	--	DRY
		12/9/2024	--	DRY	--	DRY
MW14	5,785.46	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



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)
MW14	5,785.46	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
		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
		12/9/2024	Trace	15.47	Trace	5,769.99
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
		12/9/2024	Trace	19.86	Trace	5,772.33
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



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	5,786.54	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
		3/28/2024	--	16.91	--	5,769.63
		6/3/2024	--	17.04	--	5,769.50
		9/25/2024	--	17.17	--	5,769.37
		12/9/2024	--	17.22	--	5,769.32
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
MW18	5,789.34	3/28/2024	--	22.38	--	5,762.87
		6/3/2024	--	23.02	--	5,762.23
		9/25/2024	--	21.89	--	5,763.36
		12/9/2024	--	20.94	--	5,764.31
		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



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	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
		6/3/2024	--	17.57	--	5,771.77
		9/23/2024	--	17.24	--	5,772.10
		12/9/2024	--	17.30	--	5,772.04
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
		6/3/2024	--	18.38	--	5,768.10
		9/25/2024	--	18.20	--	5,768.28
		12/10/2024	--	17.94	--	5,768.54
MW20	5,783.34	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



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	5,783.34	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
		9/25/2024	--	DRY	--	DRY
		12/9/2024	--	30.29	--	5,753.05
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
		12/9/2024	--	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



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)
MW22	5,786.25	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
		12/9/2024	--	14.34	--	5,771.91
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
		12/10/2024	--	34.05	--	5,770.75
MW24	5,782.50	6/28/2019	--	DRY	--	DRY
		9/17/2019	--	DRY	--	DRY
		12/17/2019	--	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)
MW24	5,782.50	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
		12/9/2024	--	DRY	--	DRY
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
		12/9/2024	--	33.15	--	5,742.50
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



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)
MW26	5,789.96	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
		12/10/2024	--	16.84	--	5,773.12



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		
	12/6/2022		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		
	12/10/2024		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		
	12/10/2024		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		
	12/10/2024		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		
	12/10/2024		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		
	12/10/2024		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		



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	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	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		
	12/10/2024		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		
	6/3/2024		Well Damaged, No Sample Collected		
	9/23/2024		Well Damaged, No Sample Collected		
	12/10/2024		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
	12/10/2024	<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		



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	6/7/2022		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		
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		
	12/10/2024		Insufficient Water Volumes to Collect Sample		
	10/22/2018	22	21	1.6	13
MW10	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
MW11	6/3/2024		Insufficient Water Volumes to Collect Sample		
	9/23/2024		No sample collected due to presence of PSH		
	12/10/2024		No sample collected due to presence of PSH		
	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
MW12	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
	12/9/2024	<0.0010	<0.0010	<0.0010	<0.0015
	10/22/2018	2.4	3.8	1.1	5.0
	3/29/2019	0.87	0.018	1.2	1.5



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	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
	12/8/2022	0.041	<0.020	<0.020	<0.030
MW12	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
	12/9/2024	0.0066	<0.0010	0.0043	0.0095
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			
MW15	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			
	12/9/2024	No sample collected due to presence of PSH			
MW16	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
MW16	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
	12/9/2024	No sample collected due to presence of PSH			
	3/29/2019	7.7	14	0.94	8.6
	6/28/2019	3.4	0.62	0.080	2.1



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	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		
	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
	12/9/2024	0.062	<0.020	0.21	0.077
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
MW18	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
	12/9/2024	<0.0010	<0.0010	<0.0010	<0.0015
	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	<.01	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
MW19	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
	12/9/2024	0.041	<0.020	<0.020	0.0042
	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



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	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
	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
	12/10/2024	5.2	18	1.3	9.5
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			
	12/9/2024	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			
MW22	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			
	12/9/2024	Insufficient Water Volumes to Collect Sample			
	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



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	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
	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
	12/9/2024	<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
	12/10/2024	<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			
	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			
	12/9/2024	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			



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	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		
	12/9/2024		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
	12/10/2024	<0.0010	<0.0010	<0.0010	<0.0015

Notes:

mg/L: milligrams per liter

NMWQCC: New Mexico Water Quality Control Commission

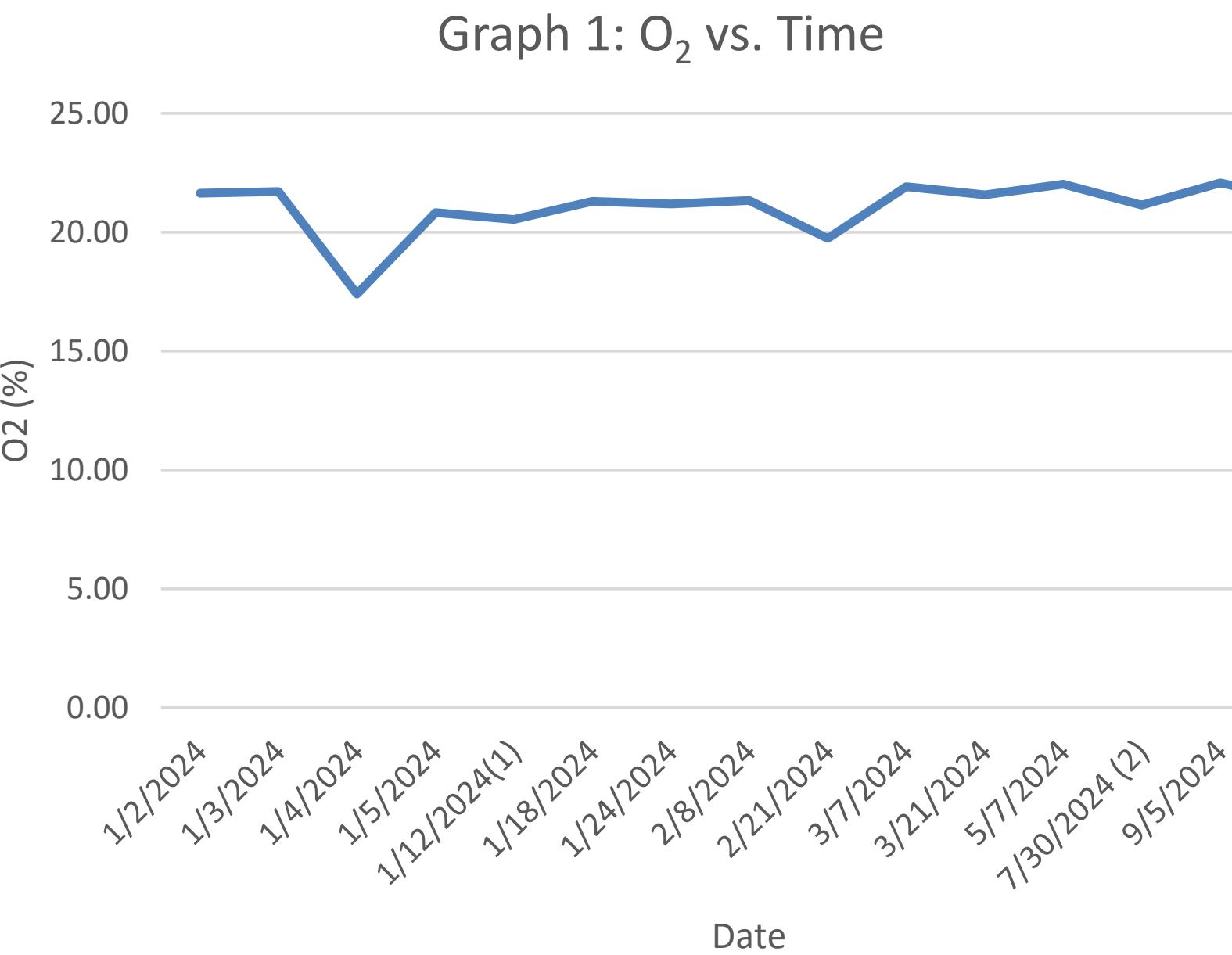
NS: not sampled

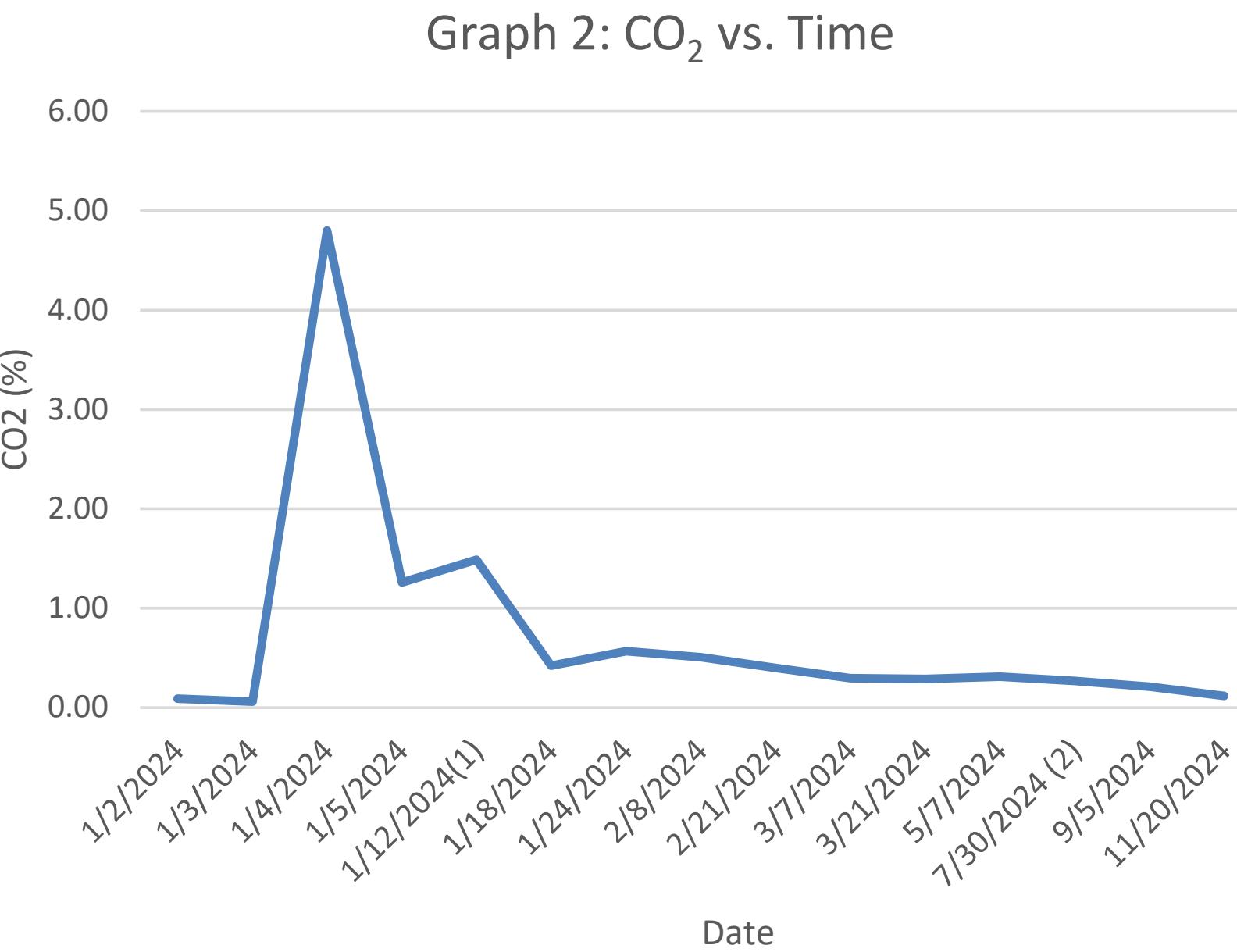
P2: sample received with pH > 2

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



M

STANDARD 1A DPE SYSTEM
O&M FORMDATE: 19-10
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)	6639.5	1505
Transfer Pump Hours (photo)	113.6	
Influent Vacuum Pre-KO (InHg)	1	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	16.75	
Post-Filter Vacuum (InHg)	15.26	
Differential Pressure (IWC)	1.5	
Exhaust Temperature (°F)	112.5	
Exhaust PID (ppm)	86.7	
Transfer Pump Pressure (PSI)	6.0	
Transfer Pump Totalizer (Gal) (photo)	118996.2	

NOTES

* Gauge muted

SVE SYSTEM SAMPLING

SAMPLE ID:	PID (ppm)	OXYGEN (%)	SAMPLE TIME: ppm
	101.4	20.5	CARBON DIOXIDE (%) 1340
OPERATING WELLS	Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)		

Change in Well Operation:

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%)
MW01	146.4	187.1	19.7	2320
MW02	128.8	79.3	20.6	1580
MW03	141.2	391.7	20.1	3040
MW06	148.9	36.2	20.7	1380
MW10	52.4	48.8	20.7	1300
MW15	181.9	38.9	20.8	20

ppm

C ₄ H ₁₀ LEL	H ₂ S ppm	CO ppm
0	1.5	0
0	0	0
0	0.5	0
0	1.0	0
0	0.5	0
0	1.0	0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	5.25	N	-0.51
MW02	10.75	N	-10.11
MW03	10.0	N	0.22
MW06	8.25	N	0.04
MW10	8.5	N	-9.27
MW15	10.25	N	0.01

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0

COMMENTS/MAINTENANCE ISSUES

--



J M

STANDARD 1A DPE SYSTEM
O&M FORM

DATE: 10-24
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)	6971.9	1123
Transfer Pump Hours (photo)	117.1	
Influent Vacuum Pre-KO (InHg)	X	
Fresh Air Bypass (% Open)	0	
Pre-Filter Vacuum (InHg)	17.5	
Post-Filter Vacuum (InHg)	16.75	
Differential Pressure (IWC)	1.0	
Exhaust Temperature (°F)	210	
Exhaust PID (ppm)	126.2	
Transfer Pump Pressure (PSI)	5.75	
Transfer Pump Totalizer (Gal) (photo)	122790.0	

NOTES

* gauge inoperable

SVE SYSTEM SAMPLING

SAMPLE ID:	PID (ppm)	OXYGEN (%)	CARBON DIOXIDE (%)	PPM
	113.9	20.9	1380	
OPERATING WELLS	Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)			

Change in Well Operation:

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%)
MW01	161.3	150.2	20.5	1540
MW02	135.2	81.7	20.6	1220
MW03	148.8	363.4	20.0	2980
MW06	143.3	36.3	20.1	2720
MW10	47.9	27.5	20.6	1280
MW15	192.9	17.5	20.9	40

CH ₄ LEL	H ₂ S ppm	CO ppm
0	0.5	0
0	0	0
0	0	0
0	0.5	0
0	0	0
0	0.5	0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	4.0	N	-0.72
MW02	15.25	N	-9.88
MW03	11.75	N	0.14
MW06	8.75	N	0.06
MW10	5.25	N	-10.07
MW15	12.5	N	*

COMMENTS/MAINTENANCE ISSUES

* cleaned water level site tube
* error message

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0

ENSOLUM

STANDARD 1A DPE SYSTEM
O&M FORMDATE: 11-11
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)	7192.7	1145
Transfer Pump Hours (photo)	118.4	
Influent Vacuum Pre-KO (InHg)	158	
Fresh Air Bypass (% Open)	10	
Pre-Filter Vacuum (InHg)	15	
Post-Filter Vacuum (InHg)	13.5	
Differential Pressure (IWC)	1.5	
Exhaust Temperature (°F)	195	
Exhaust PID (ppm)	73.8	
Transfer Pump Pressure (PSI)	6.0	
Transfer Pump Totalizer (Gal) (photo)	124181.7	

NOTES

SVE SYSTEM SAMPLING		
SAMPLE ID:		SAMPLE TIME: <u>10pm</u>
PID (ppm)	<u>49.2</u>	CARBON DIOXIDE (%) <u>1440</u>
Analytes:	OXYGEN (%) <u>20.9</u> Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)	

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%) ppm
MW01	155.2	201.0	20.9	2520
MW02	133.5	66.2	20.9	1780
MW03	185.7	116.5	20.9	2560
MW06	172.3	66.4	20.9	1980
MW10	47.7	18.8	20.9	1160
MW15	88.8	78.4	20.9	1500

CH ₄ LEL	H ₂ S ppm	CO ppm
0	0.5	0
0	0.5	0
0	0	0
0	0.5	0
0	0	0
0	0	0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	12	N	-0.62
MW02	13	N	-9.33
MW03	13.75	N	0.17
MW06	13.5	N	0.04
MW10	12	N	-8.31
MW15	12.5	N	0.02

COMMENTS/MAINTENANCE ISSUES

* Several system shut-downs likely due to floats being stuck. Washers to be installed to remedy issue.

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	8
MW07	



**STANDARD 1A DPE SYSTEM
O&M FORM**

DATE: 11-20
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)	7410.8	1404
Transfer Pump Hours (photo)	120.3	
Influent Vacuum Pre-KO (InHg)	*	
Fresh Air Bypass (% Open)	10	
Pre-Filter Vacuum (InHg)	15.5	
Post-Filter Vacuum (InHg)	14.0	
Differential Pressure (IWC)	1.5	
Exhaust Temperature (°F)	190	
Exhaust PID (ppm)	78.5	
Transfer Pump Pressure (PSI)	5.75	
Transfer Pump Totalizer (Gal) (photo)	125918.3	

NOTES

*gauge worked out

SVE SYSTEM SAMPLING

SAMPLE ID:	<u>SVE-1</u>	SAMPLE TIME: <u>1400</u> ppm
PID (ppm)	<u>70.5</u>	CARBON DIOXIDE (%) <u>8.20</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	161.3	163.0	20.9	1440
MW02	135.7	83.3	20.9	1000
MW03	184.3	157.4	20.9	1760
MW06	166.8	62.4	20.9	1640
MW10	48.1	37.6	20.9	760
MW15	83.2	91.9	20.9	1220

CH ₄ (ppm)	H ₂ S (ppm)	CO (ppm)
0	0.5	0
0	0	0
0	0	0
0	0.5	0
0	0	0
0	0	0

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	12.0	N	-0.67
MW02	13.0	N	0.38
MW03	13.75	N	-0.04
MW06	13.5	N	2.77
MW10	12.5	N	-0.13
MW15	13.5	N	X

COMMENTS/MAINTENANCE ISSUES

X error - UnFI

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0



U M

STANDARD 1A DPE SYSTEM
O&M FORMDATE: 12-10
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)	7783.5	1257
Transfer Pump Hours (photo)	130.4	
Influent Vacuum Pre-KO (InHg)	10.2	
Fresh Air Bypass (% Open)	10	
Pre-Filter Vacuum (InHg)	10.5	
Post-Filter Vacuum (InHg)	8.5	
Differential Pressure (IWC)	2.75	
Exhaust Temperature (°F)	130	
Exhaust PID (ppm)	53.8	
Transfer Pump Pressure (PSI)	11.5	
Transfer Pump Totalizer (Gal) (photo)	128056.8	

NOTES

- Pump was running on arrival, but ice in line prevented drainage.
- Opened line and poured in antifreeze, water moving again.

SVE SYSTEM SAMPLING

SAMPLE ID:	PID (ppm)	OXYGEN (%)	CARBON DIOXIDE (%)	SAMPLE TIME:
	71.6	20.9	1160	
OPERATING WELLS	Sample Bi-Monthly (every other month) for TVPH (8015), 8260 - Full List VOCs, Fixed Gas (CO2 AND O2)			

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IWC)	PID HEADSPACE (PPM)	OXYGEN (%)	CARBON DIOXIDE (%)
MW01	153.5	197.2	20.9	1860
MW02	134.7	84.4	20.9	1620
MW03	185.2	122.5	20.9	1380
MW06	164.3	70.1	20.9	1580
MW10	93.7	23.6	20.9	940
MW15	110.3	84.2	20.9	1200

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	12.0	N	-0.66
MW02	13	/	0.12
MW03	13.5	/	0.11
MW06	13.5	/	0.14
MW10	12.5	/	-0.15
MW15	13	/	0.01

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0

COMMENTS/MAINTENANCE ISSUES

--

**STANDARD 1A DPE SYSTEM
O&M FORM**

DATE: 12-19
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)	7999.3	1.333
Transfer Pump Hours (photo)	137.2	
Influent Vacuum Pre-KO (InHg)	9.6	
Fresh Air Bypass (% Open)	10	
Pre-Filter Vacuum (InHg)	10.5	
Post-Filter Vacuum (InHg)	8.75	
Differential Pressure (IWC)	2.5	
Exhaust Temperature (°F)	155	
Exhaust PID (ppm)	21.7	
Transfer Pump Pressure (PSI)	11	
Transfer Pump Totalizer (Gal) (photo)	128699.9	

SVE SYSTEM SAMPLING

SAMPLE ID:	SAMPLE TIME:	
PID (ppm)	<u>73.1</u>	OXYGEN (%)
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 (%)
MW01	65.2	37.6		
MW02	88.6	>4.4		
MW03	117.1	24.8		
MW06	98.1	25.0		
MW10	72.1	43.6		
MW15	115.3	32.8		

MANIFOLD MEASUREMENTS

WELL ID	VACUUM (InHg)	SEE LIQUIDS? (YES/NO)	DIFF. PRESS. (IWC)
MW01	7.5	N	* -16.04
MW02	8.0		0.07
MW03	7.5		0.25
MW06	9.0		-0.21
MW10	7.0		-0.28
MW15	8.0		

INFLUENCE

WELL ID	VACUUM (IWC)
MW04	0
MW07	0

COMMENTS/MAINTENANCE ISSUES

• Heat trace installed
• Technical issues with O₂/CO₂ meter
* Unfl error



APPENDIX B

Project Photographs

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

Photograph 1

Runtime meter taken on September 23, 2024 at 12:05 PM
Hours = 6,277.6



Photograph 2

Runtime meter taken on December 19, 2024 at 1:33 PM
Hours = 7,999.3



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

Photograph 3

Totalizer taken on September 23, 2024
at 12:05 PM
Gallons = 115,337.6

**Photograph 4**

Totalizer taken on June 27, 2024 at
1:30 PM
Gallons = 128,699.9





APPENDIX C

DPE Laboratory Analytical Reports



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

12

ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/9/2024 5:35:58 PM

JOB DESCRIPTION

Standard 1

JOB NUMBER

885-15771-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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

Authorization



Generated
12/9/2024 5:35:58 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: 885-15771-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	13
Certification Summary	14
Subcontract Data	17
Chain of Custody	24
Receipt Checklists	25

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-15771-1

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	1
%R	Percent Recovery	2
CFL	Contains Free Liquid	3
CFU	Colony Forming Unit	4
CNF	Contains No Free Liquid	5
DER	Duplicate Error Ratio (normalized absolute difference)	6
Dil Fac	Dilution Factor	7
DL	Detection Limit (DoD/DOE)	8
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	9
DLC	Decision Level Concentration (Radiochemistry)	10
EDL	Estimated Detection Limit (Dioxin)	11
LOD	Limit of Detection (DoD/DOE)	12
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: 885-15771-1

Job ID: 885-15771-1**Eurofins Albuquerque****Job Narrative
885-15771-1**

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 11/22/2024 6:15 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 1.2°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: 885-15771-1

Client Sample ID: SVE-1
Date Collected: 11/20/24 14:00
Date Received: 11/22/24 06:15
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-15771-1
Matrix: Air

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]	1300		100	ug/L			11/22/24 15:27	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		52 - 172				11/22/24 15:27	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			11/22/24 15:27	20
1,1,1-Trichloroethane	ND		2.0	ug/L			11/22/24 15:27	20
1,1,2,2-Tetrachloroethane	ND		4.0	ug/L			11/22/24 15:27	20
1,1,2-Trichloroethane	ND		2.0	ug/L			11/22/24 15:27	20
1,1-Dichloroethane	ND		2.0	ug/L			11/22/24 15:27	20
1,1-Dichloroethene	ND		2.0	ug/L			11/22/24 15:27	20
1,1-Dichloropropene	ND		2.0	ug/L			11/22/24 15:27	20
1,2,3-Trichlorobenzene	ND		2.0	ug/L			11/22/24 15:27	20
1,2,3-Trichloropropane	ND		4.0	ug/L			11/22/24 15:27	20
1,2,4-Trichlorobenzene	ND		2.0	ug/L			11/22/24 15:27	20
1,2,4-Trimethylbenzene	2.0		2.0	ug/L			11/22/24 15:27	20
1,2-Dibromo-3-Chloropropane	ND		4.0	ug/L			11/22/24 15:27	20
1,2-Dibromoethane (EDB)	ND		2.0	ug/L			11/22/24 15:27	20
1,2-Dichlorobenzene	ND		2.0	ug/L			11/22/24 15:27	20
1,2-Dichloroethane (EDC)	ND		2.0	ug/L			11/22/24 15:27	20
1,2-Dichloropropane	ND		2.0	ug/L			11/22/24 15:27	20
1,3,5-Trimethylbenzene	2.9		2.0	ug/L			11/22/24 15:27	20
1,3-Dichlorobenzene	ND		2.0	ug/L			11/22/24 15:27	20
1,3-Dichloropropane	ND		2.0	ug/L			11/22/24 15:27	20
1,4-Dichlorobenzene	ND		2.0	ug/L			11/22/24 15:27	20
1-Methylnaphthalene	ND		8.0	ug/L			11/22/24 15:27	20
2,2-Dichloropropane	ND		4.0	ug/L			11/22/24 15:27	20
2-Butanone	ND		20	ug/L			11/22/24 15:27	20
2-Chlorotoluene	ND		2.0	ug/L			11/22/24 15:27	20
2-Hexanone	ND		20	ug/L			11/22/24 15:27	20
2-Methylnaphthalene	ND		8.0	ug/L			11/22/24 15:27	20
4-Chlorotoluene	ND		2.0	ug/L			11/22/24 15:27	20
4-Isopropyltoluene	ND		2.0	ug/L			11/22/24 15:27	20
4-Methyl-2-pentanone	ND		20	ug/L			11/22/24 15:27	20
Acetone	ND		20	ug/L			11/22/24 15:27	20
Benzene	8.2		2.0	ug/L			11/22/24 15:27	20
Bromobenzene	ND		2.0	ug/L			11/22/24 15:27	20
Bromodichloromethane	ND		2.0	ug/L			11/22/24 15:27	20
Dibromochloromethane	ND		2.0	ug/L			11/22/24 15:27	20
Bromoform	ND		2.0	ug/L			11/22/24 15:27	20
Bromomethane	ND		6.0	ug/L			11/22/24 15:27	20
Carbon disulfide	ND		20	ug/L			11/22/24 15:27	20
Carbon tetrachloride	ND		2.0	ug/L			11/22/24 15:27	20
Chlorobenzene	ND		2.0	ug/L			11/22/24 15:27	20
Chloroethane	ND		4.0	ug/L			11/22/24 15:27	20
Chloroform	ND		2.0	ug/L			11/22/24 15:27	20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard 1

Job ID: 885-15771-1

Client Sample ID: SVE-1
Date Collected: 11/20/24 14:00
Date Received: 11/22/24 06:15
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-15771-1
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			11/22/24 15:27	20
cis-1,2-Dichloroethene	ND		2.0	ug/L			11/22/24 15:27	20
cis-1,3-Dichloropropene	ND		2.0	ug/L			11/22/24 15:27	20
Dibromomethane	ND		2.0	ug/L			11/22/24 15:27	20
Dichlorodifluoromethane	ND		2.0	ug/L			11/22/24 15:27	20
Ethylbenzene	3.1		2.0	ug/L			11/22/24 15:27	20
Hexachlorobutadiene	ND		2.0	ug/L			11/22/24 15:27	20
Isopropylbenzene	ND		2.0	ug/L			11/22/24 15:27	20
Methyl-tert-butyl Ether (MTBE)	ND		2.0	ug/L			11/22/24 15:27	20
Methylene Chloride	ND		6.0	ug/L			11/22/24 15:27	20
n-Butylbenzene	ND		6.0	ug/L			11/22/24 15:27	20
N-Propylbenzene	ND		2.0	ug/L			11/22/24 15:27	20
Naphthalene	ND		4.0	ug/L			11/22/24 15:27	20
sec-Butylbenzene	ND		2.0	ug/L			11/22/24 15:27	20
Styrene	ND		2.0	ug/L			11/22/24 15:27	20
tert-Butylbenzene	ND		2.0	ug/L			11/22/24 15:27	20
Tetrachloroethene (PCE)	ND		2.0	ug/L			11/22/24 15:27	20
Toluene	44		2.0	ug/L			11/22/24 15:27	20
trans-1,2-Dichloroethene	ND		2.0	ug/L			11/22/24 15:27	20
trans-1,3-Dichloropropene	ND		2.0	ug/L			11/22/24 15:27	20
Trichloroethene (TCE)	ND		2.0	ug/L			11/22/24 15:27	20
Trichlorofluoromethane	ND		2.0	ug/L			11/22/24 15:27	20
Vinyl chloride	ND		2.0	ug/L			11/22/24 15:27	20
Xylenes, Total	43		3.0	ug/L			11/22/24 15:27	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		11/22/24 15:27	20
Toluene-d8 (Surr)	107		70 - 130		11/22/24 15:27	20
4-Bromofluorobenzene (Surr)	98		70 - 130		11/22/24 15:27	20
Dibromofluoromethane (Surr)	100		70 - 130		11/22/24 15:27	20

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-15771-1

Method: 8015M/D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)**Lab Sample ID: MB 885-16598/4****Matrix: Air****Analysis Batch: 16598**
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			11/22/24 14:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		52 - 172				11/22/24 14:38	1

Lab Sample ID: LCS 885-16598/3**Matrix: Air****Analysis Batch: 16598**
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec Limits
Gasoline Range Organics [C6 - C10]		4250	4260		ug/L		100
Surrogate	%Recovery	Qualifer	Limits				
4-Bromofluorobenzene (Surr)	87		52 - 172				

Method: 8260B - Volatile Organic Compounds (GC/MS)**Lab Sample ID: MB 885-16467/1006****Matrix: Air****Analysis Batch: 16467**
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			11/22/24 14:38	1
1,1,1-Trichloroethane	ND		0.10	ug/L			11/22/24 14:38	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			11/22/24 14:38	1
1,1,2-Trichloroethane	ND		0.10	ug/L			11/22/24 14:38	1
1,1-Dichloroethane	ND		0.10	ug/L			11/22/24 14:38	1
1,1-Dichloroethene	ND		0.10	ug/L			11/22/24 14:38	1
1,1-Dichloropropene	ND		0.10	ug/L			11/22/24 14:38	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			11/22/24 14:38	1
1,2,3-Trichloropropane	ND		0.20	ug/L			11/22/24 14:38	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			11/22/24 14:38	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			11/22/24 14:38	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			11/22/24 14:38	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			11/22/24 14:38	1
1,2-Dichlorobenzene	ND		0.10	ug/L			11/22/24 14:38	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			11/22/24 14:38	1
1,2-Dichloropropane	ND		0.10	ug/L			11/22/24 14:38	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			11/22/24 14:38	1
1,3-Dichlorobenzene	ND		0.10	ug/L			11/22/24 14:38	1
1,3-Dichloropropane	ND		0.10	ug/L			11/22/24 14:38	1
1,4-Dichlorobenzene	ND		0.10	ug/L			11/22/24 14:38	1
1-Methylnaphthalene	ND		0.40	ug/L			11/22/24 14:38	1
2,2-Dichloropropane	ND		0.20	ug/L			11/22/24 14:38	1
2-Butanone	ND		1.0	ug/L			11/22/24 14:38	1
2-Chlorotoluene	ND		0.10	ug/L			11/22/24 14:38	1
2-Hexanone	ND		1.0	ug/L			11/22/24 14:38	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
 Project/Site: Standard 1

Job ID: 885-15771-1

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

Lab Sample ID: MB 885-16467/1006

Matrix: Air

Analysis Batch: 16467

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		11/22/24 14:38		1
4-Chlorotoluene	ND		0.10	ug/L		11/22/24 14:38		1
4-Isopropyltoluene	ND		0.10	ug/L		11/22/24 14:38		1
4-Methyl-2-pentanone	ND		1.0	ug/L		11/22/24 14:38		1
Acetone	ND		1.0	ug/L		11/22/24 14:38		1
Benzene	ND		0.10	ug/L		11/22/24 14:38		1
Bromobenzene	ND		0.10	ug/L		11/22/24 14:38		1
Bromodichloromethane	ND		0.10	ug/L		11/22/24 14:38		1
Dibromochloromethane	ND		0.10	ug/L		11/22/24 14:38		1
Bromoform	ND		0.10	ug/L		11/22/24 14:38		1
Bromomethane	ND		0.30	ug/L		11/22/24 14:38		1
Carbon disulfide	ND		1.0	ug/L		11/22/24 14:38		1
Carbon tetrachloride	ND		0.10	ug/L		11/22/24 14:38		1
Chlorobenzene	ND		0.10	ug/L		11/22/24 14:38		1
Chloroethane	ND		0.20	ug/L		11/22/24 14:38		1
Chloroform	ND		0.10	ug/L		11/22/24 14:38		1
Chloromethane	ND		0.30	ug/L		11/22/24 14:38		1
cis-1,2-Dichloroethene	ND		0.10	ug/L		11/22/24 14:38		1
cis-1,3-Dichloropropene	ND		0.10	ug/L		11/22/24 14:38		1
Dibromomethane	ND		0.10	ug/L		11/22/24 14:38		1
Dichlorodifluoromethane	ND		0.10	ug/L		11/22/24 14:38		1
Ethylbenzene	ND		0.10	ug/L		11/22/24 14:38		1
Hexachlorobutadiene	ND		0.10	ug/L		11/22/24 14:38		1
Isopropylbenzene	ND		0.10	ug/L		11/22/24 14:38		1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L		11/22/24 14:38		1
Methylene Chloride	ND		0.30	ug/L		11/22/24 14:38		1
n-Butylbenzene	ND		0.30	ug/L		11/22/24 14:38		1
N-Propylbenzene	ND		0.10	ug/L		11/22/24 14:38		1
Naphthalene	ND		0.20	ug/L		11/22/24 14:38		1
sec-Butylbenzene	ND		0.10	ug/L		11/22/24 14:38		1
Styrene	ND		0.10	ug/L		11/22/24 14:38		1
tert-Butylbenzene	ND		0.10	ug/L		11/22/24 14:38		1
Tetrachloroethene (PCE)	ND		0.10	ug/L		11/22/24 14:38		1
Toluene	ND		0.10	ug/L		11/22/24 14:38		1
trans-1,2-Dichloroethene	ND		0.10	ug/L		11/22/24 14:38		1
trans-1,3-Dichloropropene	ND		0.10	ug/L		11/22/24 14:38		1
Trichloroethene (TCE)	ND		0.10	ug/L		11/22/24 14:38		1
Trichlorofluoromethane	ND		0.10	ug/L		11/22/24 14:38		1
Vinyl chloride	ND		0.10	ug/L		11/22/24 14:38		1
Xylenes, Total	ND		0.15	ug/L		11/22/24 14:38		1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 130		11/22/24 14:38	1
Toluene-d8 (Surr)	93		70 - 130		11/22/24 14:38	1
4-Bromofluorobenzene (Surr)	91		70 - 130		11/22/24 14:38	1
Dibromofluoromethane (Surr)	108		70 - 130		11/22/24 14:38	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
 Project/Site: Standard 1

Job ID: 885-15771-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**Lab Sample ID: MB 885-16467/6****Matrix: Air****Analysis Batch: 16467**
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		11/22/24 14:38		1
1,1,1-Trichloroethane	ND		1.0	ug/L		11/22/24 14:38		1
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L		11/22/24 14:38		1
1,1,2-Trichloroethane	ND		1.0	ug/L		11/22/24 14:38		1
1,1-Dichloroethane	ND		1.0	ug/L		11/22/24 14:38		1
1,1-Dichloroethene	ND		1.0	ug/L		11/22/24 14:38		1
1,1-Dichloropropene	ND		1.0	ug/L		11/22/24 14:38		1
1,2,3-Trichlorobenzene	ND		1.0	ug/L		11/22/24 14:38		1
1,2,3-Trichloropropane	ND		2.0	ug/L		11/22/24 14:38		1
1,2,4-Trichlorobenzene	ND		1.0	ug/L		11/22/24 14:38		1
1,2,4-Trimethylbenzene	ND		1.0	ug/L		11/22/24 14:38		1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L		11/22/24 14:38		1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L		11/22/24 14:38		1
1,2-Dichlorobenzene	ND		1.0	ug/L		11/22/24 14:38		1
1,2-Dichloroethane (EDC)	ND		1.0	ug/L		11/22/24 14:38		1
1,2-Dichloropropane	ND		1.0	ug/L		11/22/24 14:38		1
1,3,5-Trimethylbenzene	ND		1.0	ug/L		11/22/24 14:38		1
1,3-Dichlorobenzene	ND		1.0	ug/L		11/22/24 14:38		1
1,3-Dichloropropane	ND		1.0	ug/L		11/22/24 14:38		1
1,4-Dichlorobenzene	ND		1.0	ug/L		11/22/24 14:38		1
1-Methylnaphthalene	ND		4.0	ug/L		11/22/24 14:38		1
2,2-Dichloropropane	ND		2.0	ug/L		11/22/24 14:38		1
2-Butanone	ND		10	ug/L		11/22/24 14:38		1
2-Chlorotoluene	ND		1.0	ug/L		11/22/24 14:38		1
2-Hexanone	ND		10	ug/L		11/22/24 14:38		1
2-Methylnaphthalene	ND		4.0	ug/L		11/22/24 14:38		1
4-Chlorotoluene	ND		1.0	ug/L		11/22/24 14:38		1
4-Isopropyltoluene	ND		1.0	ug/L		11/22/24 14:38		1
4-Methyl-2-pentanone	ND		10	ug/L		11/22/24 14:38		1
Acetone	ND		10	ug/L		11/22/24 14:38		1
Benzene	ND		1.0	ug/L		11/22/24 14:38		1
Bromobenzene	ND		1.0	ug/L		11/22/24 14:38		1
Bromodichloromethane	ND		1.0	ug/L		11/22/24 14:38		1
Dibromochloromethane	ND		1.0	ug/L		11/22/24 14:38		1
Bromoform	ND		1.0	ug/L		11/22/24 14:38		1
Bromomethane	ND		3.0	ug/L		11/22/24 14:38		1
Carbon disulfide	ND		10	ug/L		11/22/24 14:38		1
Carbon tetrachloride	ND		1.0	ug/L		11/22/24 14:38		1
Chlorobenzene	ND		1.0	ug/L		11/22/24 14:38		1
Chloroethane	ND		2.0	ug/L		11/22/24 14:38		1
Chloroform	ND		1.0	ug/L		11/22/24 14:38		1
Chloromethane	ND		3.0	ug/L		11/22/24 14:38		1
cis-1,2-Dichloroethene	ND		1.0	ug/L		11/22/24 14:38		1
cis-1,3-Dichloropropene	ND		1.0	ug/L		11/22/24 14:38		1
Dibromomethane	ND		1.0	ug/L		11/22/24 14:38		1
Dichlorodifluoromethane	ND		1.0	ug/L		11/22/24 14:38		1
Ethylbenzene	ND		1.0	ug/L		11/22/24 14:38		1
Hexachlorobutadiene	ND		1.0	ug/L		11/22/24 14:38		1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-15771-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**Lab Sample ID: MB 885-16467/6****Matrix: Air****Analysis Batch: 16467**
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	Result	MB Qualifier	MB RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	ug/L		11/22/24 14:38		1
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L		11/22/24 14:38		1
Methylene Chloride	ND		3.0	ug/L		11/22/24 14:38		1
n-Butylbenzene	ND		3.0	ug/L		11/22/24 14:38		1
N-Propylbenzene	ND		1.0	ug/L		11/22/24 14:38		1
Naphthalene	ND		2.0	ug/L		11/22/24 14:38		1
sec-Butylbenzene	ND		1.0	ug/L		11/22/24 14:38		1
Styrene	ND		1.0	ug/L		11/22/24 14:38		1
tert-Butylbenzene	ND		1.0	ug/L		11/22/24 14:38		1
Tetrachloroethene (PCE)	ND		1.0	ug/L		11/22/24 14:38		1
Toluene	ND		1.0	ug/L		11/22/24 14:38		1
trans-1,2-Dichloroethene	ND		1.0	ug/L		11/22/24 14:38		1
trans-1,3-Dichloropropene	ND		1.0	ug/L		11/22/24 14:38		1
Trichloroethene (TCE)	ND		1.0	ug/L		11/22/24 14:38		1
Trichlorofluoromethane	ND		1.0	ug/L		11/22/24 14:38		1
Vinyl chloride	ND		1.0	ug/L		11/22/24 14:38		1
Xylenes, Total	ND		1.5	ug/L		11/22/24 14:38		1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 130		11/22/24 14:38	1
Toluene-d8 (Surr)	93		70 - 130		11/22/24 14:38	1
4-Bromofluorobenzene (Surr)	91		70 - 130		11/22/24 14:38	1
Dibromofluoromethane (Surr)	108		70 - 130		11/22/24 14:38	1

Lab Sample ID: LCS 885-16467/4**Matrix: Air****Analysis Batch: 16467**
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	20.0		ug/L		99	70 - 130
Benzene	20.1	22.3		ug/L		111	70 - 130
Chlorobenzene	20.1	19.6		ug/L		98	70 - 130
Toluene	20.2	19.6		ug/L		97	70 - 130
Trichloroethene (TCE)	20.2	20.1		ug/L		100	70 - 130

Surrogate	LC%Recovery	LC%Qualifer	LC%Limits
1,2-Dichloroethane-d4 (Surr)	113		70 - 130
Toluene-d8 (Surr)	94		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-15771-1

GC/MS VOA**Analysis Batch: 16467**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-15771-1	SVE-1	Total/NA	Air	8260B	
MB 885-16467/1006	Method Blank	Total/NA	Air	8260B	
MB 885-16467/6	Method Blank	Total/NA	Air	8260B	
LCS 885-16467/4	Lab Control Sample	Total/NA	Air	8260B	

Analysis Batch: 16598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-15771-1	SVE-1	Total/NA	Air	8015M/D	
MB 885-16598/4	Method Blank	Total/NA	Air	8015M/D	
LCS 885-16598/3	Lab Control Sample	Total/NA	Air	8015M/D	

1

2

3

4

5

6

7

8

9

10

11

12

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
 Project/Site: Standard 1

Job ID: 885-15771-1

Client Sample ID: SVE-1
Date Collected: 11/20/24 14:00
Date Received: 11/22/24 06:15

Lab Sample ID: 885-15771-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015M/D		20	16598	CM	EET ALB	11/22/24 15:27
Total/NA	Analysis	8260B		20	16467	CM	EET ALB	11/22/24 15:27

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

1

2

3

4

5

6

7

8

9

10

11

12

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Standard 1

Job ID: 885-15771-1

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: 885-15771-1

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: 885-15771-1

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



ANALYTICAL SUMMARY REPORT

December 03, 2024

Hall Environmental
 4901 Hawkins St NE Ste D
 Albuquerque, NM 87109-4372

Work Order: B24111817 Quote ID: B15626

Project Name: 88501698, Standard 1

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 11/25/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24111817-001	SVE-1 (885-15771-1)	11/20/24 14:00	11/25/24	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.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: 88501698, Standard 1
Lab ID: B24111817-001
Client Sample ID: SVE-1 (885-15771-1)

Report Date: 12/03/24
Collection Date: 11/20/24 14:00
DateReceived: 11/25/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.34	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Nitrogen	78.54	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Carbon Dioxide	0.12	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Hydrogen Sulfide	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Methane	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Ethane	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Propane	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Isobutane	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
n-Butane	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Isopentane	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
n-Pentane	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Hexanes plus	<0.01	Mol %		0.01	GPA 2261-13	11/27/24 09:50 / jrj	
Propane	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
Isobutane	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
n-Butane	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
Isopentane	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
n-Pentane	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
Hexanes plus	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
GPM Total	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
GPM Pentanes plus	< 0.001	gpm		0.001	GPA 2261-13	11/27/24 09:50 / jrj	
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1	GPA 2261-13	11/27/24 09:50 / jrj	
Net BTU per cu ft @ std cond. (LHV)	ND			1	GPA 2261-13	11/27/24 09:50 / jrj	
Pseudo-critical Pressure, psia	544			1	GPA 2261-13	11/27/24 09:50 / jrj	
Pseudo-critical Temperature, deg R	239			1	GPA 2261-13	11/27/24 09:50 / jrj	
Specific Gravity @ 60/60F	0.998			0.001	D3588-81	11/27/24 09:50 / jrj	
Air, %	97.51			0.01	GPA 2261-13	11/27/24 09:50 / 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

Report Definitions: RL - Analyte Reporting Limit
 QCL - Quality Control Limit

MCL - Maximum Contaminant Level
 ND - Not detected at the Reporting Limit (RL)

**QA/QC Summary Report**

Prepared by Billings, MT Branch

Work Order: B24111817

Report Date: 12/03/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-13										Batch: R433211
Lab ID: B24111819-001ADUP	12	Sample Duplicate								Run: GCNGA-B_241127A 11/27/24 12:17
Oxygen		19.0	Mol %	0.01				0.4		20
Nitrogen		80.9	Mol %	0.01				0.1		20
Carbon Dioxide		0.09	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		0.01	Mol %	0.01				0.0		20
Lab ID: LCS112724	11	Laboratory Control Sample								Run: GCNGA-B_241127A 11/27/24 14:06
Oxygen		0.62	Mol %	0.01	124	70	130			
Nitrogen		5.95	Mol %	0.01	99	70	130			
Carbon Dioxide		1.00	Mol %	0.01	101	70	130			
Methane		74.8	Mol %	0.01	100	70	130			
Ethane		6.02	Mol %	0.01	100	70	130			
Propane		5.05	Mol %	0.01	102	70	130			
Isobutane		1.69	Mol %	0.01	84	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		1.02	Mol %	0.01	102	70	130			
n-Pentane		1.01	Mol %	0.01	101	70	130			
Hexanes plus		0.81	Mol %	0.01	101	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 406.252.6325 • Casper, WY 307.235.0515
Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

Work Order Receipt Checklist

Hall Environmental

B24111817

Login completed by: Crystal M. Jones

Date Received: 11/25/2024

Reviewed by: tjones

Received by: SAY

Reviewed Date: 11/27/2024

Carrier name: FedEx NDA

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	7.7°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

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



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 406.252.6325 • Casper, WY 307.235.0515
Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Environment Testing

Chain of Custody Record

Eurofins Albuquerque

4901 Hawkins NE
Albuquerque NM 87108

Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analysis & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/testitem(s) being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification

Unconfirmed

Primary Deliverable Rank: 2

Date:

Date:

Date/Time: 10/10/11

1130

Rate/Lime

Date/Time:

卷之三

卷之三

100

ICOC No:
885-2922

Containers
Count
1
Container Type
Tedlar Bag 1L

Preservative
None

Subcontract Method Instructions

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

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

Chain-of-Custody RecordClient: Hilcorp Standard Rush

Project Name:

Standard 1

Mailing Address:

885-15771 COC

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87105

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

Phone #:

email or Fax#: brandon.sinclair@hilcorp.com

Project Manager:

QA/QC Package:

 Standard Level 4 (Full Validation)

Accreditation:

 Az Compliance OtherSampler: Brandon SinclairOn Ice: Yes# of Coolers: 1

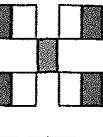
WOSO

Cooler Temp (including CF): 1.1 +0.1 = 1.2 (°C)

EDD (Type)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
11-20-1400	air	SVE-1		2 Teflar		

Turn-Around Time:

**HALL ENVIRONMENTAL ANALYSIS LABOR**

www.hallenvironmental.com

885-15771 COC

4901 Hawkins NE - Albuquerque, NM 87105

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

Analysis Request

BTEX / MTBE / TMB's (8021)	
TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHS by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	
8015 TRPH	
Fixed gas O ₂ & CO ₂	

Received by: Brando Date: 1/21/24 Time: 1320 Remarks:Received by: Via: Date: 1/21/24 Time: 1320Received by: Via: Date: 1/21/24 Time: 13201
2
3
4
5
6
7
8
9
10
11
12

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

Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-15771-1

Login Number: 15771**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	



APPENDIX D

Groundwater Laboratory Analytical Reports



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/18/2024 7:04:02 PM

JOB DESCRIPTION

Standard #1

JOB NUMBER

885-16709-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.
Released to Imaging: 1/10/2025 9:22:42 AM

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



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

Generated
12/18/2024 7:04:02 PM

Client: Hilcorp Energy
Project/Site: Standard #1

Laboratory Job ID: 885-16709-1

1

2

3

4

5

6

7

8

9

10

11

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	16
QC Association Summary	18
Lab Chronicle	19
Certification Summary	21
Chain of Custody	22
Receipt Checklists	23

Definitions/Glossary

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

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

Eurofins Albuquerque

Case Narrative

Client: Hilcorp Energy
Project: Standard #1

Job ID: 885-16709-1

Job ID: 885-16709-1**Eurofins Albuquerque****Job Narrative
885-16709-1**

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 12/11/2024 6:10 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 0.7°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: 885-16709-1

Client Sample ID: MW-8
 Date Collected: 12/10/24 11:00
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-1
 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		12/16/24 00:48		1
Ethylbenzene	ND		1.0	ug/L		12/16/24 00:48		1
Toluene	ND		1.0	ug/L		12/16/24 00:48		1
Xylenes, Total	ND		1.5	ug/L		12/16/24 00:48		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		12/16/24 00:48	1
4-Bromofluorobenzene (Surr)	97		70 - 130		12/16/24 00:48	1
Dibromofluoromethane (Surr)	97		70 - 130		12/16/24 00:48	1
Toluene-d8 (Surr)	104		70 - 130		12/16/24 00:48	1

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-11
Date Collected: 12/09/24 13:30
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-2
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		12/16/24 01:12		1
Ethylbenzene	ND		1.0	ug/L		12/16/24 01:12		1
Toluene	ND		1.0	ug/L		12/16/24 01:12		1
Xylenes, Total	ND		1.5	ug/L		12/16/24 01:12		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		12/16/24 01:12	1
4-Bromofluorobenzene (Surr)	98		70 - 130		12/16/24 01:12	1
Dibromofluoromethane (Surr)	97		70 - 130		12/16/24 01:12	1
Toluene-d8 (Surr)	102		70 - 130		12/16/24 01:12	1

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-12
 Date Collected: 12/09/24 11:00
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-3
 Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6.6		1.0	ug/L		12/16/24 01:37		1
Ethylbenzene	4.3		1.0	ug/L		12/16/24 01:37		1
Toluene	ND		1.0	ug/L		12/16/24 01:37		1
Xylenes, Total	9.5		1.5	ug/L		12/16/24 01:37		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		12/16/24 01:37	1
4-Bromofluorobenzene (Surr)	99		70 - 130		12/16/24 01:37	1
Dibromofluoromethane (Surr)	100		70 - 130		12/16/24 01:37	1
Toluene-d8 (Surr)	105		70 - 130		12/16/24 01:37	1

1

2

3

4

5

6

7

8

9

10

11

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-16
 Date Collected: 12/09/24 11:30
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-4
 Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	62		20	ug/L		12/16/24 02:01		20
Ethylbenzene	210		20	ug/L		12/16/24 02:01		20
Toluene	ND		20	ug/L		12/16/24 02:01		20
Xylenes, Total	77		30	ug/L		12/16/24 02:01		20
Surrogate				Prepared		Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	98		70 - 130			12/16/24 02:01		20
4-Bromofluorobenzene (Surr)	94		70 - 130			12/16/24 02:01		20
Dibromofluoromethane (Surr)	99		70 - 130			12/16/24 02:01		20
Toluene-d8 (Surr)	100		70 - 130			12/16/24 02:01		20

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-17
 Date Collected: 12/09/24 12:20
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-5
 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		12/16/24 02:25		1
Ethylbenzene	ND		1.0	ug/L		12/16/24 02:25		1
Toluene	ND		1.0	ug/L		12/16/24 02:25		1
Xylenes, Total	ND		1.5	ug/L		12/16/24 02:25		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		12/16/24 02:25	1
4-Bromofluorobenzene (Surr)	99		70 - 130		12/16/24 02:25	1
Dibromofluoromethane (Surr)	97		70 - 130		12/16/24 02:25	1
Toluene-d8 (Surr)	101		70 - 130		12/16/24 02:25	1

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-18
 Date Collected: 12/09/24 14:40
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-6
 Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	41		2.0	ug/L		12/16/24 18:48		2
Ethylbenzene	ND		2.0	ug/L		12/16/24 18:48		2
Toluene	ND		2.0	ug/L		12/16/24 18:48		2
Xylenes, Total	4.2		3.0	ug/L		12/16/24 18:48		2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		12/16/24 18:48	2
4-Bromofluorobenzene (Surr)	96		70 - 130		12/16/24 18:48	2
Dibromofluoromethane (Surr)	99		70 - 130		12/16/24 18:48	2
Toluene-d8 (Surr)	97		70 - 130		12/16/24 18:48	2

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-19
 Date Collected: 12/10/24 10:00
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-7
 Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5200		200	ug/L			12/16/24 03:13	200
Ethylbenzene	1300		200	ug/L			12/16/24 03:13	200
Toluene	18000		200	ug/L			12/16/24 03:13	200
Xylenes, Total	9500		300	ug/L			12/16/24 03:13	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		12/16/24 03:13	200
4-Bromofluorobenzene (Surr)	96		70 - 130		12/16/24 03:13	200
Dibromofluoromethane (Surr)	100		70 - 130		12/16/24 03:13	200
Toluene-d8 (Surr)	100		70 - 130		12/16/24 03:13	200

1

2

3

4

5

6

7

8

9

10

11

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-22
 Date Collected: 12/09/24 14:00
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-8
 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			12/16/24 03:37	1
Ethylbenzene	ND		1.0	ug/L			12/16/24 03:37	1
Toluene	ND		1.0	ug/L			12/16/24 03:37	1
Xylenes, Total	ND		1.5	ug/L			12/16/24 03:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		12/16/24 03:37	1
4-Bromofluorobenzene (Surr)	96		70 - 130		12/16/24 03:37	1
Dibromofluoromethane (Surr)	100		70 - 130		12/16/24 03:37	1
Toluene-d8 (Surr)	101		70 - 130		12/16/24 03:37	1

1

2

3

4

5

6

7

8

9

10

11

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-23
Date Collected: 12/10/24 12:55
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-9
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			12/16/24 20:26	1
Ethylbenzene	ND		1.0	ug/L			12/16/24 20:26	1
Toluene	ND		1.0	ug/L			12/16/24 20:26	1
Xylenes, Total	ND		1.5	ug/L			12/16/24 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130		12/16/24 20:26	1
4-Bromofluorobenzene (Surr)	95		70 - 130		12/16/24 20:26	1
Dibromofluoromethane (Surr)	102		70 - 130		12/16/24 20:26	1
Toluene-d8 (Surr)	98		70 - 130		12/16/24 20:26	1

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-26
 Date Collected: 12/10/24 12:00
 Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-10
 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			12/16/24 21:38	1
Ethylbenzene	ND		1.0	ug/L			12/16/24 21:38	1
Toluene	ND		1.0	ug/L			12/16/24 21:38	1
Xylenes, Total	ND		1.5	ug/L			12/16/24 21:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 130				12/16/24 21:38	1
4-Bromofluorobenzene (Surr)	96		70 - 130				12/16/24 21:38	1
Dibromofluoromethane (Surr)	102		70 - 130				12/16/24 21:38	1
Toluene-d8 (Surr)	98		70 - 130				12/16/24 21:38	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-16709-1

Method: 8260B - Volatile Organic Compounds (GC/MS)**Lab Sample ID: MB 885-17790/6****Matrix: Water****Analysis Batch: 17790**
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Benzene	ND				1.0	ug/L			12/15/24 18:43	1
Ethylbenzene	ND				1.0	ug/L			12/15/24 18:43	1
Toluene	ND				1.0	ug/L			12/15/24 18:43	1
Xylenes, Total	ND				1.5	ug/L			12/15/24 18:43	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits		D	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
1,2-Dichloroethane-d4 (Surr)	97		70 - 130						12/15/24 18:43	1
4-Bromofluorobenzene (Surr)	99		70 - 130						12/15/24 18:43	1
Dibromofluoromethane (Surr)	97		70 - 130						12/15/24 18:43	1
Toluene-d8 (Surr)	99		70 - 130						12/15/24 18:43	1

Lab Sample ID: LCS 885-17790/5**Matrix: Water****Analysis Batch: 17790**
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits
	Added	Result	Qualifier						
Benzene		20.1		20.0		ug/L		99	70 - 130
Toluene		20.2		21.6		ug/L		107	70 - 130
Surrogate									
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits		D	%Rec	Limits
	Result	Qualifier							
1,2-Dichloroethane-d4 (Surr)	100		70 - 130						
4-Bromofluorobenzene (Surr)	99		70 - 130						
Dibromofluoromethane (Surr)	94		70 - 130						
Toluene-d8 (Surr)	105		70 - 130						

Lab Sample ID: LCS 885-17949/12**Matrix: Water****Analysis Batch: 17949**
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits
	Added	Result	Qualifier						
Benzene		20.1		21.1		ug/L		105	70 - 130
Toluene		20.2		19.7		ug/L		98	70 - 130
Surrogate									
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits		D	%Rec	Limits
	Result	Qualifier							
1,2-Dichloroethane-d4 (Surr)	106		70 - 130						
4-Bromofluorobenzene (Surr)	97		70 - 130						
Dibromofluoromethane (Surr)	100		70 - 130						
Toluene-d8 (Surr)	99		70 - 130						

Lab Sample ID: 885-16709-9 MS**Matrix: Water****Analysis Batch: 17949**
Client Sample ID: MW-23
Prep Type: Total/NA

Analyte	Sample	Sample	Spikes	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier						
Benzene	ND		20.1	21.8		ug/L			108	70 - 130	
Toluene	ND		20.2	20.5		ug/L			102	70 - 130	

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**Lab Sample ID: 885-16709-9 MS**
Client Sample ID: MW-23
Prep Type: Total/NA
Matrix: Water**Analysis Batch: 17949**

Surrogate	MS	MS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)			101		70 - 130
4-Bromofluorobenzene (Surr)			96		70 - 130
Dibromofluoromethane (Surr)			96		70 - 130
Toluene-d8 (Surr)			98		70 - 130

Lab Sample ID: 885-16709-9 MSD
Client Sample ID: MW-23
Prep Type: Total/NA
Matrix: Water**Analysis Batch: 17949**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	ND		20.1	21.1		ug/L		105	70 - 130	3	20
Toluene	ND		20.2	19.8		ug/L		98	70 - 130	3	20

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)			105		70 - 130
4-Bromofluorobenzene (Surr)			96		70 - 130
Dibromofluoromethane (Surr)			97		70 - 130
Toluene-d8 (Surr)			99		70 - 130

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

GC/MS VOA**Analysis Batch: 17790**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16709-1	MW-8	Total/NA	Water	8260B	1
885-16709-2	MW-11	Total/NA	Water	8260B	2
885-16709-3	MW-12	Total/NA	Water	8260B	3
885-16709-4	MW-16	Total/NA	Water	8260B	4
885-16709-5	MW-17	Total/NA	Water	8260B	5
885-16709-7	MW-19	Total/NA	Water	8260B	6
885-16709-8	MW-22	Total/NA	Water	8260B	7
MB 885-17790/6	Method Blank	Total/NA	Water	8260B	8
LCS 885-17790/5	Lab Control Sample	Total/NA	Water	8260B	9

Analysis Batch: 17949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16709-6	MW-18	Total/NA	Water	8260B	10
885-16709-9	MW-23	Total/NA	Water	8260B	11
885-16709-10	MW-26	Total/NA	Water	8260B	
LCS 885-17949/12	Lab Control Sample	Total/NA	Water	8260B	
885-16709-9 MS	MW-23	Total/NA	Water	8260B	
885-16709-9 MSD	MW-23	Total/NA	Water	8260B	

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-8

Date Collected: 12/10/24 11:00
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17790	CM	EET ALB	12/16/24 00:48

Client Sample ID: MW-11

Date Collected: 12/09/24 13:30
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17790	CM	EET ALB	12/16/24 01:12

Client Sample ID: MW-12

Date Collected: 12/09/24 11:00
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17790	CM	EET ALB	12/16/24 01:37

Client Sample ID: MW-16

Date Collected: 12/09/24 11:30
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		20	17790	CM	EET ALB	12/16/24 02:01

Client Sample ID: MW-17

Date Collected: 12/09/24 12:20
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17790	CM	EET ALB	12/16/24 02:25

Client Sample ID: MW-18

Date Collected: 12/09/24 14:40
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		2	17949	RA	EET ALB	12/16/24 18:48

Client Sample ID: MW-19

Date Collected: 12/10/24 10:00
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		200	17790	CM	EET ALB	12/16/24 03:13

Eurofins Albuquerque

Lab Chronicle

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

Client Sample ID: MW-22
Date Collected: 12/09/24 14:00
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17790	CM	EET ALB	12/16/24 03:37

Client Sample ID: MW-23
Date Collected: 12/10/24 12:55
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17949	RA	EET ALB	12/16/24 20:26

Client Sample ID: MW-26
Date Collected: 12/10/24 12:00
Date Received: 12/11/24 06:10

Lab Sample ID: 885-16709-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	17949	RA	EET ALB	12/16/24 21:38

Laboratory References:

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

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
 Project/Site: Standard #1

Job ID: 885-16709-1

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.			
<u>Analysis Method</u>	<u>Prep Method</u>	<u>Matrix</u>	<u>Analyte</u>
8260B		Water	Benzene
8260B		Water	Ethylbenzene
8260B		Water	Toluene
8260B		Water	Xylenes, Total
Oregon	NELAP		NM100001
			02-25-25

Eurofins Albuquerque

Chain-of-Custody Record

Client: Hilcorp Farmington NM

Mailing Address: 382 Road 3100 Aztec, NM 87410

Billing Address: PO Box 61529 Houston, TX 77208

Phone #: 505-486-9543

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

				Turn-Around Time:		
				<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush	Project Name:
				Standard #1		Project #:
QA/QC Package:	<input type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)				
Accreditation:	<input type="checkbox"/> Az Compliance			Sampler: Brandon Sinclair		
<input type="checkbox"/> NELAC	<input type="checkbox"/> Other			On Ice: <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	mgd
<input type="checkbox"/> EDD (Type)				# of Coolers: 1		
				Cooler Temp (including CF): 0.46 ± 0.1 ± 0.7 °C		
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
12-10	11:00	H2O	MW-8	(3) 40ml VOA	HCL/Cool	X
12-9	13:30	H2O	MW-11	(3) 40ml VOA	HCL/Cool	X
12-9	11:00	H2O	MW-12	(3) 40ml VOA	HCL/Cool	X
12-9	11:20	H2O	MW-15	(3) 40ml VOA	HCL/Cool	X
12-9	11:30	H2O	MW-16	(3) 40ml VOA	HCL/Cool	X
12-9	12:20	H2O	MW-17	(3) 40ml VOA	HCL/Cool	X
12-9	12:40	H2O	MW-18	(3) 40ml VOA	HCL/Cool	X
12-10	12:00	H2O	MW-19	(3) 40ml VOA	HCL/Cool	X
12-9	14:00	H2O	MW-22	(3) 40ml VOA	HCL/Cool	X
12-10	12:55	H2O	MW-23	(3) 40ml VOA	HCL/Cool	X
12-10	12:00	H2O	MW-26	(3) 40ml VOA	HCL/Cool	X
Date:	Time:	Relinquished by:	Via:	Date:	Time:	Remarks: Special Pricing, See Andy.
12-10	13:45		John White	12/10/24	1545	
Date:	Time:	Relinquished by:	Via:	Date:	Time:	
12/10/24	17:45		John White	12/10/24	17:45	

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



885-16709 COC

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11

Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-16709-1

Login Number: 16709**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: [Mitch Killough](#)
To: [Velez, Nelson, EMNRD](#); [Adeloye, Abiodun A](#)
Cc: [Danny Burns](#); [Stuart Hyde](#); [Hannah Mishriki](#); [Brandon Sinclair](#)
Subject: RE: [EXTERNAL] NCS1735235018 - Standard 1 Dual Phase Extraction Runtime Issue
Date: Friday, November 8, 2024 2:17:28 PM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL**]

Good afternoon.

I wanted to loop back with both of you regarding the Standard 1 DPE. As of 11/6/2024, the DPE is back online. We performed a cleaning out of the knockout tank and de-scaling of the manifold. In addition, this included a replacement of the float stem assembly. We will be closely watching this unit in the coming days to make sure nothing else needs to be addressed.

Let us know if you have any questions or concerns.

Have a great weekend.

Mitch Killough
Hilcorp Energy Company
713-757-5247 (Office)
281-851-2338 (Mobile)

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Thursday, October 31, 2024 12:54 PM
To: Mitch Killough <mkillough@hilcorp.com>; Adeloye, Abiodun A <aadeloye@blm.gov>
Cc: Danny Burns <dburns@ensolum.com>; shyde@ensolum.com; 'hmishriki@ensolum.com'
<hmishriki@ensolum.com>; Brandon Sinclair <Brandon.Sinclair@hilcorp.com>
Subject: Re: [EXTERNAL] NCS1735235018 - Standard 1 Dual Phase Extraction Runtime Issue

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

Good afternoon Mitch,

Thank you for the update. Very much appreciated. Please keep OCD abreast of the status as received.

Thanks again and have a safe and pleasant day!

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/ocd>



From: Mitch Killough <mkillough@hilcorp.com>

Sent: Thursday, October 31, 2024 11:49 AM

To: Adeloye, Abiodun A <aadeloye@blm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Cc: Danny Burns <dburns@ensolum.com>; shyde@ensolum.com <shyde@ensolum.com>; hmishriki@ensolum.com' <hmishriki@ensolum.com>; Brandon Sinclair <Brandon.Sinclair@hilcorp.com>

Subject: [EXTERNAL] NCS1735235018 - Standard 1 Dual Phase Extraction Runtime Issue

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

Hi Nelson and Emmanuel.

I wanted to bring to your attention an issue we are experiencing at the Standard 1 DPE unit in San Juan County, NM. Starting on 10/28/2024 at 2:57 pm, Hilcorp was alerted of an OFF alarm sent out via CYGNET for the Standard 1 DPE unit. Following Hilcorp and Ensolum's troubleshooting efforts, it was determined yesterday that the float stem assembly needs to be replaced. Our I&E department has determined the appropriate corrective action and has been in contact with a local electric supply company to make the fix. Our intent is to be back online by the end of this week, barring any unforeseen long lead times for parts. Once the unit is back online, I will follow up with you both.

Please let myself or Ensolum know if either of you have any questions or concerns.

Thanks.

Mitch Killough

Environmental Specialist
Hilcorp Energy Company
1111 Travis Street
Houston, TX 77002
713-757-5247 (office)
281-851-2338 (cell)
mkillough@hilcorp.com

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 419627

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 419627
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Created By	Condition	Condition Date
nvelez	SVE reviewed - 1. Continue O&M & sampling as stated in report. 2. Submit next quarterly report by April 15, 2025.	1/17/2025