

REVIEWED

By NVElez at 1:05 pm, Jul 23, 2025



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

July 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: Second Quarter 2025 – SVE System Update

L C Kelly 1E
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: nAPP2308124076

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Second Quarter 2025 –SVE System Update* report summarizing the soil vapor extraction (SVE) system performance at the L C Kelly 1E natural gas production well (Site). The Site is located on land managed by the Bureau of Land Management (BLM) in Unit C, Section 5, Township 30 North, Range 12 West in San Juan County, New Mexico (Figure 1). The SVE system was put into operation on January 6, 2025, to remediate historical subsurface soil impacts discovered at the Site. This report summarizes Site activities performed in April, May, and June of 2025.

SVE SYSTEM SPECIFICATIONS

The SVE system at the Site consists of a 3-phase, 6 horsepower Roots 42 URAI positive displacement blower capable of producing approximately 140 inlet cubic feet per minute (icfm) flow at 100 inches of water column (IWC) vacuum at Site elevation. The system is powered by a generator capable of operating 24 hours per day. Additionally, a backup generator has been placed at the Site to minimize system downtime if there are operational/maintenance issues with the primary generator. Eleven SVE wells, SVE01 through SVE11, are currently in operation and are shown on Figure 2. The *Updated Site Investigation Report and Remediation Work Plan*, dated June 5, 2024, proposed extraction on SVE wells SVE01, SVE02, and SVE04 through SVE11; however, upon further evaluation, SVE03 was added to the system layout and plumbed to the manifold. The manifold was constructed in such a manner as to allow the wells to be cycled, if necessary.

SECOND QUARTER 2025 ACTIVITIES

The SVE system began operation on January 6, 2025. Based on the New Mexico Oil Conservation Division (NMOCD) Conditions of Approval (COAs), dated March 15, 2024, operations and maintenance (O&M) visits and/or field data measurements were collected from the system bi-weekly throughout the second quarter of 2025. Field measurements included the following parameters: total system flow, estimated flow rates from each SVE well, photoionization detector (PID) measurements of volatile organic compounds (VOCs) from each SVE well, vacuum

measurements from each SVE well, and oxygen/carbon dioxide measurements via hand-held analyzers from each SVE well. Field notes taken during O&M visits are presented in Appendix A.

Since startup, all Site SVE wells were operated in order to induce flow in impacted soil zones. Between March 26 and June 30, 2025, the SVE system operated for 2,170.9 hours for a runtime efficiency of 94.2 percent (%). Appendix B presents photographs of the runtime meter for calculating the second quarter 2025 runtime efficiency. Table 1 presents the SVE system operational hours and calculated percent runtime.

Based on the March 15, 2024, COAs, vapor samples are being collected bi-monthly (every other month). A vapor sample was collected on May 15, 2025, from a sample port located between the SVE piping manifold and the SVE blower using a high vacuum air sampler. Prior to collection, the vapor sample was field screened with a PID for organic vapor monitoring (OVM). The vapor samples were collected directly into two 1-Liter Tedlar® bags and submitted to Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico for analysis of total volatile petroleum hydrocarbons (TVPH – also known as total petroleum hydrocarbons – gasoline range organics (TPH-GRO)) following United States Environmental Protection Agency (EPA) Method 8015D, VOCs following EPA Method 8260B, and fixed gas analysis of oxygen and carbon dioxide following Gas Processors Association (GPA) Method 2261. Tables 2 and 3 present a summary of field measurements and analytical data, respectively, collected since system startup in January of 2025. The full laboratory analytical report is attached as Appendix C. Graphs 1 and 2 present oxygen and carbon dioxide levels over time, respectively.

Vapor sample data and measured stack flow rates are used to estimate total mass recovered and total emissions generated by the SVE system (Table 4). Based on these estimates, 5,224 pounds (2.6 tons) of TVPH have been removed by the system to date. Vapor sampling will continue bi-monthly (every other month) for the first year of operation.

DISCUSSION AND RECOMMENDATIONS

O&M visits will be conducted twice per month and bi-monthly (every other month) sampling events will continue to be performed by Ensolum and/or Hilcorp personnel to verify the SVE 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.

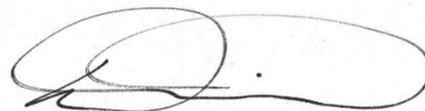
We appreciate the opportunity to provide this report to the NMOCD. If you should have any questions or comments regarding this report, please contact the undersigned.

Sincerely,

Ensolum, LLC



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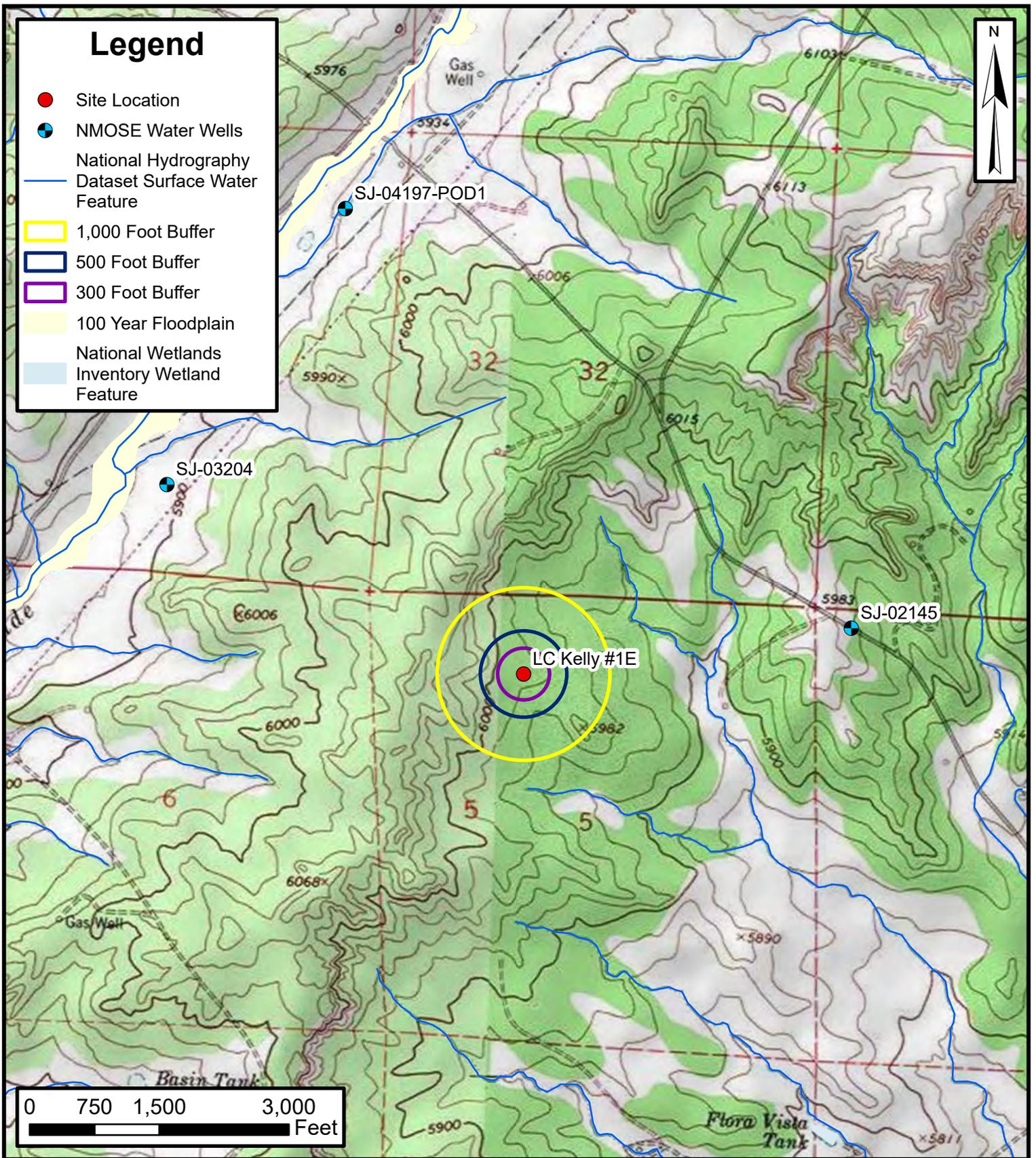
Attachments:

Figure 1	Site Location Map
Figure 2	Radius of Influence and Effect
Table 1	Soil Vapor Extraction System Runtime Calculations
Table 2	Soil Vapor Extraction System Field Measurements
Table 3	Soil Vapor Extraction System Air Analytical Results
Table 4	Soil Vapor Extraction System Mass Removal and Emissions
Graph 1	Oxygen vs Time
Graph 2	Carbon Dioxide vs Time
Appendix A	Field Notes
Appendix B	Project Photographs
Appendix C	Laboratory Analytical Reports



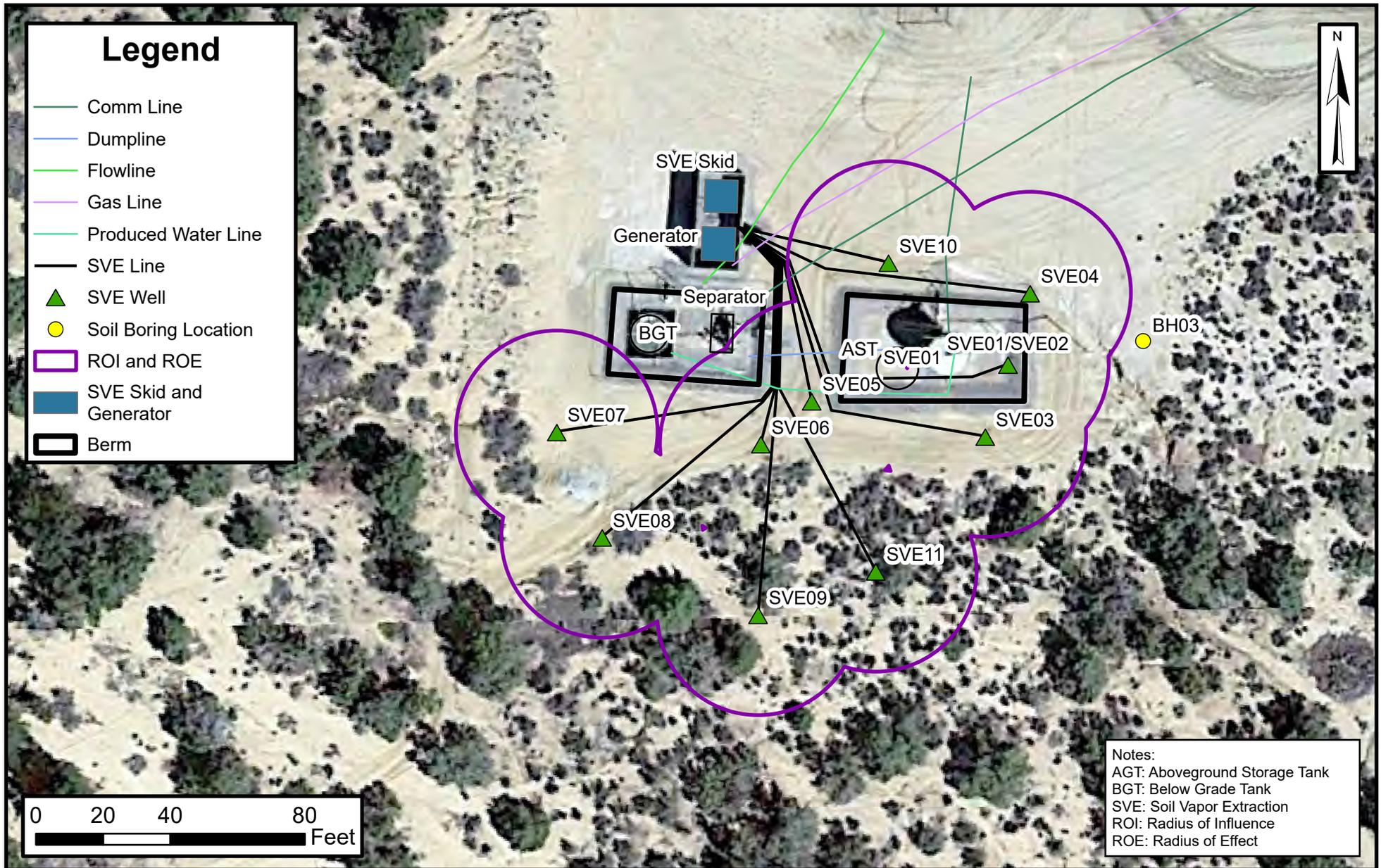
Figures





Site Location Map
 L C Kelly #1E
 Hilcorp Energy Company
 36.84600, -108.12450
 Unit C, Sec 05, T30N, R12W
 San Juan County, New Mexico

FIGURE
1



SVE System Radius of Influence and Radius of Effect

L C Kelly 1E
 Hilcorp Energy Company
 36.84600, -108.12450
 Unit C, Sec 05, T30N, R12W
 San Juan County, New Mexico

FIGURE
2





Tables & Graphs





TABLE 1
SOIL VAPOR EXTRACTION SYSTEM RUNTIME CALCULATIONS
 L C Kelly 1E
 Hilcorp Energy Company
 San Juan County, New Mexico

Date	Total Operational Hours	Delta Hours	Days	Percent Runtime	Cumulative Percent Runtime
1/6/2025	3.7	Startup			
3/26/2025	1,746.9	340.7	14	101.4%	91.9%
4/16/2025	2,208.9	462.0	21	91.7%	91.9%
4/25/2025	2,426.0	217.1	9	100.5%	92.6%
5/15/2025	2,905.3	479.3	20	99.9%	93.7%
5/20/2025	3,025.5	120.2	5	100.2%	94.0%
6/17/2025	3,626.6	601.1	28	89.4%	93.2%
6/30/2025	3,917.8	291.2	13	93.3%	93.2%
2nd Qtr 2025 Runtime:					94.2%



TABLE 2
SOIL VAPOR EXTRACTION SYSTEM FIELD MEASUREMENTS
 L C Kelly 1E
 Hilcorp Energy Company
 San Juan County, New Mexico

SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm)	Vacuum (IWC)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
Influent, All Wells	1/6/2025	1,512	0.36	210	134	76.5	2.8	8.6	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	692	0.32	198	127	74.8	2.7	16.9	4.16
	1/9/2025	338	0.36	210	137	68.0	2.5	18.7	>5.0
	1/10/2025	633	0.35	207	135	68.0	2.5	20.1	>5.0
	1/14/2025	293	0.40	221	145	68.0	2.5	20.7	0.78
	1/22/2025	199	0.46	237	161	54.4	2.0	19.9	>5.0
	1/29/2025	654	0.40	221	150	54.4	2.0	19.3	>5.0
	2/5/2025	439	0.34	204	133	68.0	2.5	20.8	>5.0
	2/12/2025	313	0.36	210	143	54.4	2.0	20.9	0.54
	2/19/2025	102	0.35	207	135	68.0	2.5	20.9	0.69
	2/26/2025	368	0.32	198	137	47.6	1.7	20.7	0.98
	3/5/2025	583	0.35	207	143	47.6	1.7	20.9	0.27
	3/12/2025	420	0.38	216	147	54.4	2.0	20.9	0.27
	3/26/2025	508	0.35	207	141	54.4	2.0	20.9	0.43
	4/16/2025	587	0.22	164	107	69.4	2.5	--	--
	4/25/2025	572	0.32	198	132	61.2	2.2	--	--
	5/15/2025	410	0.27	182	120	64.6	2.3	--	--
	5/20/2025	387	0.30	192	127	64.6	2.3	--	--
	6/17/2025	358	0.30	192	127	64.6	2.3	--	--
6/30/2025	395	0.30	192	127	64.6	2.3	--	--	
SVE01	1/6/2025	1,216	--	29	19.1	66.1	2.4	3.7	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	816	--	5	3.3	69.7	2.5	12.1	>5.0
	1/9/2025	614	--	5	3.4	59.6	2.2	14.6	>5.0
	1/10/2025	706	--	5	3.3	62.6	2.3	16.3	>5.0
	1/14/2025	663	--	5	3.4	59.6	2.2	16.5	>5.0
	1/22/2025	586	--	6	4.2	40.2	1.5	19.1	>5.0
	1/29/2025	812	--	7	4.8	50.5	1.8	20.9	0.61
	2/5/2025	1,056	--	5	3.4	52.3	1.9	18.0	>5.0
	2/12/2025	574	--	8	5.5	48.6	1.8	18.4	>5.0
	2/19/2025	470	--	7	4.7	60.1	2.2	20.3	0.95
	2/26/2025	475	--	8	5.5	51.2	1.8	20.5	>5.0
	3/5/2025	678	--	10	6.9	48.1	1.7	20.9	0.13
	3/12/2025	387	--	10	6.8	56.7	2.0	20.1	0.61
	3/26/2025	322	--	6	4.2	48.0	1.7	19.9	>5.0
	4/16/2025	1,219	--	13	8.5	67.5	2.4	17.1	1.70
	4/25/2025	1,141	--	13	8.5	67.5	2.4	17.7	1.50
	5/15/2025	809	--	13	8.5	67.5	2.4	--	--
	5/20/2025	953	--	13	8.5	67.5	2.4	--	--
	6/17/2025	670	--	13	8.5	68.5	2.5	18.5	>1.0
6/30/2025	725	--	13	8.5	67.8	2.4	18.9	>1.0	
SVE02	1/6/2025	1,420	--	5	3.3	62.9	2.3	12.1	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	1,335	--	33	21.5	69.6	2.5	20.6	1.26
	1/9/2025	815	--	26	17.4	59.1	2.1	20.9	0.49
	1/10/2025	546	--	26	17.5	57.3	2.1	20.9	0.48
	1/14/2025	470	--	28	18.9	57.1	2.1	20.7	0.59
	1/22/2025	824	--	17	12.1	39.1	1.4	19.8	>5.0
	1/29/2025	583	--	26	18.0	48.0	1.7	16.9	>5.0
	2/5/2025	519	--	28	19.0	55.5	2.0	20.9	0.33
	2/12/2025	512	--	26	17.9	50.7	1.8	20.9	0.59
	2/19/2025	357	--	28	18.9	57.6	2.1	20.9	0.27
	2/26/2025	376	--	26	17.7	53.3	1.9	20.9	0.48
	3/5/2025	691	--	24	16.7	45.6	1.6	20.1	0.59
	3/12/2025	450	--	28	19.3	49.3	1.8	20.9	0.15
	3/26/2025	348	--	22	15.4	45.2	1.6	20.8	0.24
	4/16/2025	546	--	0	0.0	58.1	2.1	20.0	0.30
	4/25/2025	730	--	31	20.9	56.7	2.0	20.7	0.00
	5/15/2025	602	--	31	20.9	56.9	2.1	--	--
	5/20/2025	693	--	31	20.9	56.7	2.0	--	--
	6/17/2025	389	--	31	20.7	60.6	2.2	20.5	0.30
6/30/2025	352	--	31	20.8	59.2	2.1	20.6	0.30	
SVE03	1/6/2025	1,370	--	5	3.3	67.1	2.4	14.9	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	793	--	--	--	76.9	2.8	19.5	2.58
	1/9/2025	729	--	5	3.3	66.2	2.4	20.9	>5.0
	1/10/2025	571	--	7	4.6	66.3	2.4	20.4	0.89
	1/14/2025	522	--	8	5.3	65.2	2.4	20.1	0.89
	1/22/2025	222	--	38	26.0	52.8	1.9	20.9	0.21
	1/29/2025	351	--	9	6.2	50.0	1.8	20.8	0.29
2/5/2025	587	--	7	4.7	56.4	2.0	20.1	0.50	



TABLE 2 SOIL VAPOR EXTRACTION SYSTEM FIELD MEASUREMENTS L C Kelly 1E Hilcorp Energy Company San Juan County, New Mexico										
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm)	Vacuum (IWC)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)	
SVE03	2/12/2025	114	--	12	8.2	51.7	1.9	20.9	0.25	
	2/19/2025	125	--	10	6.7	59.6	2.2	20.9	0.17	
	2/26/2025	111	--	12	8.1	57.2	2.1	20.9	0.16	
	3/5/2025	537	--	8	5.6	44.1	1.6	20.9	0.09	
	3/12/2025	428	--	10	6.9	49.8	1.8	20.9	0.12	
	3/26/2025	418	--	10	7.0	41.7	1.5	20.9	0.12	
	4/16/2025	352	--	14	9.4	60.4	2.2	20.9	0.00	
	4/25/2025	339	--	12	8.0	60.4	2.2	20.9	0.00	
	5/15/2025	235	--	13	8.7	60.4	2.2	--	--	
	5/20/2025	320	--	14	9.4	60.4	2.2	--	--	
6/17/2025	256	--	13	8.7	61.1	2.2	20.9	0.15		
6/30/2025	310	--	14	9.3	60.9	2.2	20.9	0.12		
SVE04	1/6/2025	1,095	--	5	3.2	74.4	2.7	10.5	>5.0	
	1/7/2025	--	--	--	--	--	--	--	--	
	1/8/2025	623	--	5	3.1	81.1	2.9	11.5	>5.0	
	1/9/2025	429	--	5	3.3	63.5	2.3	11.9	>5.0	
	1/10/2025	415	--	5	3.3	67.2	2.4	14.6	>5.0	
	1/14/2025	480	--	5	3.3	66.1	2.4	16.1	>5.0	
	1/22/2025	650	--	--	--	--	--	17.8	--	
	1/29/2025	Well Offline - In Need of Repairs								
	2/5/2025	267	--	--	--	68.8	2.5	19.2	>5.0	
	2/12/2025	276	--	--	--	56.3	2.0	20.1	>5.0	
	2/19/2025	142	--	--	--	65.4	2.4	19.7	>5.0	
	2/26/2025	102	--	--	--	65.2	2.4	20.7	0.89	
	3/5/2025	689	--	--	--	51.7	1.9	18.2	>5.0	
	3/12/2025	574	--	--	--	58.5	2.1	19.0	>5.0	
	3/26/2025	481	--	--	--	50.2	1.8	19.0	>5.0	
	4/16/2025	257	--	--	--	67.6	2.4	18.7	1.30	
4/25/2025	608	--	--	--	66.4	2.4	18.4	1.30		
5/15/2025	486	--	--	--	67.2	2.4	--	--		
5/20/2025	538	--	--	--	67.0	2.4	--	--		
6/17/2025	368	--	--	--	69.0	2.5	19.0	>1.0		
6/30/2025	353	--	--	--	67.8	2.4	19.2	>1.0		
SVE05	1/6/2025	1,602	--	10	6.6	63.8	2.3	4.5	>5.0	
	1/7/2025	--	--	--	--	--	--	--	--	
	1/8/2025	1,067	--	14	9.3	60.9	2.2	12.0	>5.0	
	1/9/2025	1,081	--	14	9.4	60.5	2.2	15.3	>5.0	
	1/10/2025	867	--	14	9.3	61.3	2.2	16.5	>5.0	
	1/14/2025	776	--	16	10.7	59.2	2.1	20.9	>5.0	
	1/22/2025	578	--	22	15.2	49.8	1.8	20.9	>5.0	
	1/29/2025	619	--	25	17.3	47.8	1.7	20.1	>5.0	
	2/5/2025	563	--	30	20.2	58.1	2.1	20.7	>5.0	
	2/12/2025	208	--	35	24.2	49.2	1.8	20.1	>5.0	
	2/19/2025	301	--	34	23.3	51.2	1.8	20.1	>5.0	
	2/26/2025	178	--	25	17.0	54.8	2.0	20.4	>5.0	
	3/5/2025	682	--	24	16.7	46.1	1.7	20.6	0.43	
	3/12/2025	386	--	30	20.7	50.1	1.8	20.4	0.54	
	3/26/2025	318	--	25	17.3	48.1	1.7	20.9	0.29	
	4/16/2025	627	--	16	11.6	30.5	1.1	20.3	0.60	
	4/25/2025	443	--	15	10.9	29.9	1.1	20.3	0.40	
5/15/2025	583	--	14	10.2	30.3	1.1	--	--		
5/20/2025	610	--	14	10.1	31.1	1.1	--	--		
6/17/2025	375	--	14	10.1	34.0	1.2	20.2	0.41		
6/30/2025	425	--	14	10.1	31.4	1.1	20.1	0.88		
SVE06	1/6/2025	1,265	--	28	18.7	60.3	2.2	5.8	>5.0	
	1/7/2025	--	--	--	--	--	--	--	--	
	1/8/2025	1,327	--	33	22.4	55.6	2.0	18.6	2.62	
	1/9/2025	267	--	30	20.1	60.1	2.2	20.0	>5.0	
	1/10/2025	213	--	30	20.1	59.6	2.2	20.9	0.01	
	1/14/2025	190	--	36	24.1	60.0	2.2	20.9	0.08	
	1/22/2025	653	--	38	25.5	59.1	2.1	20.7	0.65	
	1/29/2025	729	--	36	25.4	41.1	1.5	20.9	0.78	
	2/5/2025	708	--	32	22.5	41.7	1.5	20.9	0.32	
	2/12/2025	309	--	38	26.0	52.5	1.9	20.9	0.45	
	2/19/2025	503	--	38	26.8	41.1	1.5	20.9	0.84	
	2/26/2025	231	--	14	9.9	40.2	1.5	20.9	0.64	
	3/5/2025	733	--	7	4.9	40.8	1.5	20.9	0.14	
	3/12/2025	591	--	11	7.7	44.1	1.6	20.9	0.24	
	3/26/2025	610	--	28	19.9	39.2	1.4	20.9	0.21	
	4/16/2025	435	--	8	5.6	17.0	0.6	20.9	0.40	
	4/25/2025	560	--	8	5.6	16.8	0.6	20.3	0.10	
5/15/2025	547	--	8	5.6	17.1	0.6	--	--		



TABLE 2 SOIL VAPOR EXTRACTION SYSTEM FIELD MEASUREMENTS L C Kelly 1E Hilcorp Energy Company San Juan County, New Mexico									
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm)	Vacuum (IWC)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
SVE06	5/20/2025	474	--	8	5.6	17.0	0.6	--	--
	6/17/2025	342	--	8	5.6	16.7	0.6	20.2	0.94
	6/30/2025	297	--	8	5.6	16.7	0.6	20.2	0.92
SVE07	1/6/2025	231	--	17	11.3	63.5	2.3	7.2	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	684	--	--	--	57.7	2.1	20.9	0.44
	1/9/2025	392	--	18	11.9	63.9	2.3	17.5	>5.0
	1/10/2025	311	--	18	11.9	64.8	2.3	20.9	0.01
	1/14/2025	281	--	18	11.8	66.0	2.4	20.9	0.04
	1/22/2025	366	--	18	12.1	57.2	2.1	20.1	0.67
	1/29/2025	465	--	18	12.2	55.3	2.0	20.3	0.75
	2/5/2025	501	--	18	11.9	63.6	2.3	19.4	>5.0
	2/12/2025	398	--	18	12.7	40.3	1.5	19.1	>5.0
	2/19/2025	277	--	20	13.6	54.2	2.0	20.4	>5.0
	2/26/2025	225	--	18	12.0	62.2	2.2	20.9	>5.0
	3/5/2025	631	--	18	12.4	50.6	1.8	19.4	0.89
	3/12/2025	600	--	18	12.3	52.8	1.9	19.1	0.76
	3/26/2025	269	--	12	8.3	48.7	1.8	19.9	0.54
	4/16/2025	350	--	17	11.4	58.9	2.1	19.1	1.40
	4/25/2025	360	--	14	9.4	58.2	2.1	18.9	1.00
	5/15/2025	400	--	13	8.7	58.3	2.1	--	--
5/20/2025	376	--	15	10.1	58.2	2.1	--	--	
6/17/2025	307	--	14	9.3	62.6	2.3	19.2	>1.0	
6/30/2025	333	--	15	10.0	59.7	2.2	19.1	>1.0	
SVE08	1/6/2025	517	--	13	8.6	64.3	2.3	7.3	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	621	--	18	12.1	58.5	2.1	16.5	>5.0
	1/9/2025	281	--	14	9.4	60.0	2.2	17.3	>5.0
	1/10/2025	18	--	14	9.3	61.3	2.2	18.0	>5.0
	1/14/2025	412	--	15	9.9	63.8	2.3	19.1	>5.0
	1/22/2025	318	--	7	4.8	52.7	1.9	20.4	>5.0
	1/29/2025	331	--	18	12.2	55.6	2.0	18.9	>5.0
	2/5/2025	259	--	15	10.0	62.3	2.2	19.8	>5.0
	2/12/2025	152	--	8	5.4	54.0	1.9	19.7	0.82
	2/19/2025	127	--	18	11.9	65.0	2.3	20.5	>5.0
	2/26/2025	113	--	16	10.7	61.4	2.2	20.5	>5.0
	3/5/2025	394	--	8	5.5	48.3	1.7	19.6	0.58
	3/12/2025	276	--	15	10.4	49.1	1.8	19.8	0.62
	3/26/2025	281	--	8	5.5	52.0	1.9	20.1	0.60
	4/16/2025	206	--	6	4.2	42.2	1.5	19.1	1.00
	4/25/2025	191	--	5	3.5	41.0	1.5	18.6	0.80
	5/15/2025	181	--	6	3.9	42.0	1.5	--	--
5/20/2025	169	--	6	4.2	41.3	1.5	--	--	
6/17/2025	154	--	6	3.9	42.8	1.5	19.1	>1.0	
6/30/2025	147	--	6	3.9	41.9	1.5	19.3	>1.0	
SVE09	1/6/2025	685	--	5	3.3	61.2	2.2	9.4	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	635	--	5	3.2	72.7	2.6	17.2	4.86
	1/9/2025	727	--	5	3.3	63.2	2.3	19.1	>5.0
	1/10/2025	294	--	8	5.3	64.6	2.3	20.9	0.79
	1/14/2025	362	--	7	4.6	63.1	2.3	20.9	0.80
	1/22/2025	207	--	5	3.4	53.4	1.9	20.8	>5.0
	1/29/2025	308	--	6	4.1	49.3	1.8	20.8	>5.0
	2/5/2025	341	--	7	4.7	57.3	2.1	20.9	0.90
	2/12/2025	131	--	6	4.1	56.0	2.0	20.9	0.82
	2/19/2025	336	--	12	8.0	61.5	2.2	20.9	0.57
	2/26/2025	198	--	8	5.4	59.2	2.1	20.9	0.68
	3/5/2025	365	--	5	3.4	51.0	1.8	20.9	0.22
	3/12/2025	489	--	--	--	49.8	1.8	20.9	0.36
	3/26/2025	421	--	5	3.4	51.1	1.8	20.9	0.24
	4/16/2025	275	--	5	3.3	61.7	2.2	20.9	0.40
	4/25/2025	216	--	4	2.7	62.3	2.2	20.9	0.00
	5/15/2025	214	--	3	2.0	62.5	2.3	--	--
5/20/2025	273	--	4	2.7	62.4	2.3	--	--	
6/17/2025	114	--	4	2.6	63.7	2.3	20.9	0.17	
6/30/2025	121	--	4	2.6	63.6	2.3	20.9	0.15	
SVE10	1/6/2025	1,307	--	5	--	71.9	--	3.0	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	1,250	--	5	3.2	77.9	2.8	8.9	>5.0
	1/9/2025	699	--	5	3.3	62.4	2.3	11.7	>5.0
	1/10/2025	429	--	5	3.3	67.7	2.4	14.5	>5.0



TABLE 2 SOIL VAPOR EXTRACTION SYSTEM FIELD MEASUREMENTS L C Kelly 1E Hilcorp Energy Company San Juan County, New Mexico									
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm)	Vacuum (IWC)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
SVE10	1/14/2025	518	--	5	3.3	66.6	2.4	17.2	0.80
	1/22/2025	1,385	--	5	3.5	42.2	1.5	20.3	>5.0
	1/29/2025	672	--	5	3.7	18.9	0.7	14.9	>5.0
	2/5/2025	714	--	5	3.5	46.4	1.7	13.9	>5.0
	2/12/2025	530	--	5	3.4	58.5	2.1	13.3	>5.0
	2/19/2025	195	--	12	8.0	63.1	2.3	18.8	>5.0
	2/26/2025	214	--	30	20.1	59.5	2.1	19.8	>5.0
	3/5/2025	1,056	--	--	--	49.8	1.8	15.2	>5.0
	3/12/2025	941	--	--	--	45.9	1.7	16.1	>5.0
	3/26/2025	850	--	5	3.5	48.9	1.8	17.8	>5.0
	4/16/2025	935	--	4	2.6	67.4	2.4	16.2	4.10
	4/25/2025	968	--	4	2.6	67.4	2.4	16.1	2.90
	5/15/2025	711	--	3	2.0	66.3	2.4	--	--
	5/20/2025	722	--	4	--	67.4	2.4	--	--
6/17/2025	430	--	4	--	65.8	2.4	19.7	>1.0	
6/30/2025	490	--	4	2.6	65.6	2.4	19.7	>1.0	
SVE11	1/6/2025	846	--	7	4.7	61.8	2.2	12.5	>5.0
	1/7/2025	--	--	--	--	--	--	--	--
	1/8/2025	718	--	8	5.2	72.7	2.6	17.7	3.50
	1/9/2025	699	--	5	3.3	63.0	2.3	19.0	>5.0
	1/10/2025	449	--	5	3.4	57.8	2.1	19.5	>5.0
	1/14/2025	701	--	5	3.4	55.1	2.0	19.1	0.79
	1/22/2025	276	--	11	7.4	58.1	2.1	20.8	0.21
	1/29/2025	278	--	6	3.8	74.5	2.7	20.9	0.21
	2/5/2025	364	--	5	3.6	29.1	1.1	20.9	0.84
	2/12/2025	134	--	5	3.6	33.6	1.2	20.9	0.96
	2/19/2025	63	--	5	3.6	31.1	1.1	20.9	0.79
	2/26/2025	176	--	15	11.0	27.2	1.0	20.9	0.49
	3/5/2025	455	--	8	5.6	41.7	1.5	20.9	0.28
	3/12/2025	398	--	10	7.0	44.2	1.6	20.9	0.42
	3/26/2025	201	--	10	7.0	42.3	1.5	20.9	0.21
	4/16/2025	225	--	5	3.1	51.9	1.9	20.9	0.30
	4/25/2025	253	--	5	3.4	53.0	1.9	20.5	0.10
	5/15/2025	179	--	4	2.8	47.3	1.7	--	--
5/20/2025	210	--	4	2.7	52.1	1.9	--	--	
6/17/2025	173	--	4	2.8	47.1	1.7	20.9	0.39	
6/30/2025	149	--	4	2.8	50.3	1.8	20.9	0.40	

Notes:
 IWC: inches of water column
 PID: photoionization detector
 ppm: parts per million
 acfm: actual cubic feet per minute
 scfm: standard cubic feet per minute
 %: percent
 --: not measured

TABLE 3
SOIL VAPOR EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS
 L C Kelly 1E
 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 (%)
1/6/2025	1,512	410	270	26	240	57,000 E	7.65%	12.40%
1/7/2025	--	310	420	40	350	39,000	14.78%	5.20%
1/14/2025	293.2	31	55	4.0	35	3,700	20.71%	1.06%
1/22/2025	198.9	7.9	10	<2.0	<3.0	1,200	20.82%	0.75%
1/29/2025	653.8	20	68	7.2	71	4,300	20.81%	1.21%
2/5/2025	439.2	8.6	51	5.0	49	2,500	20.97%	0.89%
2/12/2025	313.2	8.9	58	<5.0	25	2,500	21.53%	0.74%
3/12/2025	101.6	<5.0	6.1	<5.0	<7.5	660	21.22%	0.70%
3/26/2025	508.2	3.7	28	4.8	56	2,000	21.36%	0.56%
5/15/2025	409.5	5.3	33	4.6	59	2,500	21.20%	0.65%

Notes:

- GRO: gasoline range organics
- µg/L: microgram per liter
- PID: photoionization detector
- ppm: parts per million
- TVPH: total volatile petroleum hydrocarbons
- ?: percent
- Gray: less than laboratory reporting limit
- E: result exceeded calibration range



TABLE 4
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS
 L C Kelly 1E
 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)
1/6/2025	1,512	410	270	26	240	57,000
1/7/2025	--	310	420	40	350	39,000
1/14/2025	293.2	31	55	4	35	3,700
1/22/2025	198.9	8	10	<2.0	<3.0	1,200
1/29/2025	653.8	20	68	7	71	4,300
2/5/2025	439.2	9	51	5	49	2,500
2/12/2025	313.2	9	58	<5.0	25	2,500
3/12/2025	101.6	<5.0	6	<5.0	<7.5	660
3/26/2025	508.2	3.7	28	4.8	56	2,000
5/15/2025	409.5	5.3	33	4.6	59	2,500
Average	492	81	100	10	90	11,536

Vapor Extraction Summary

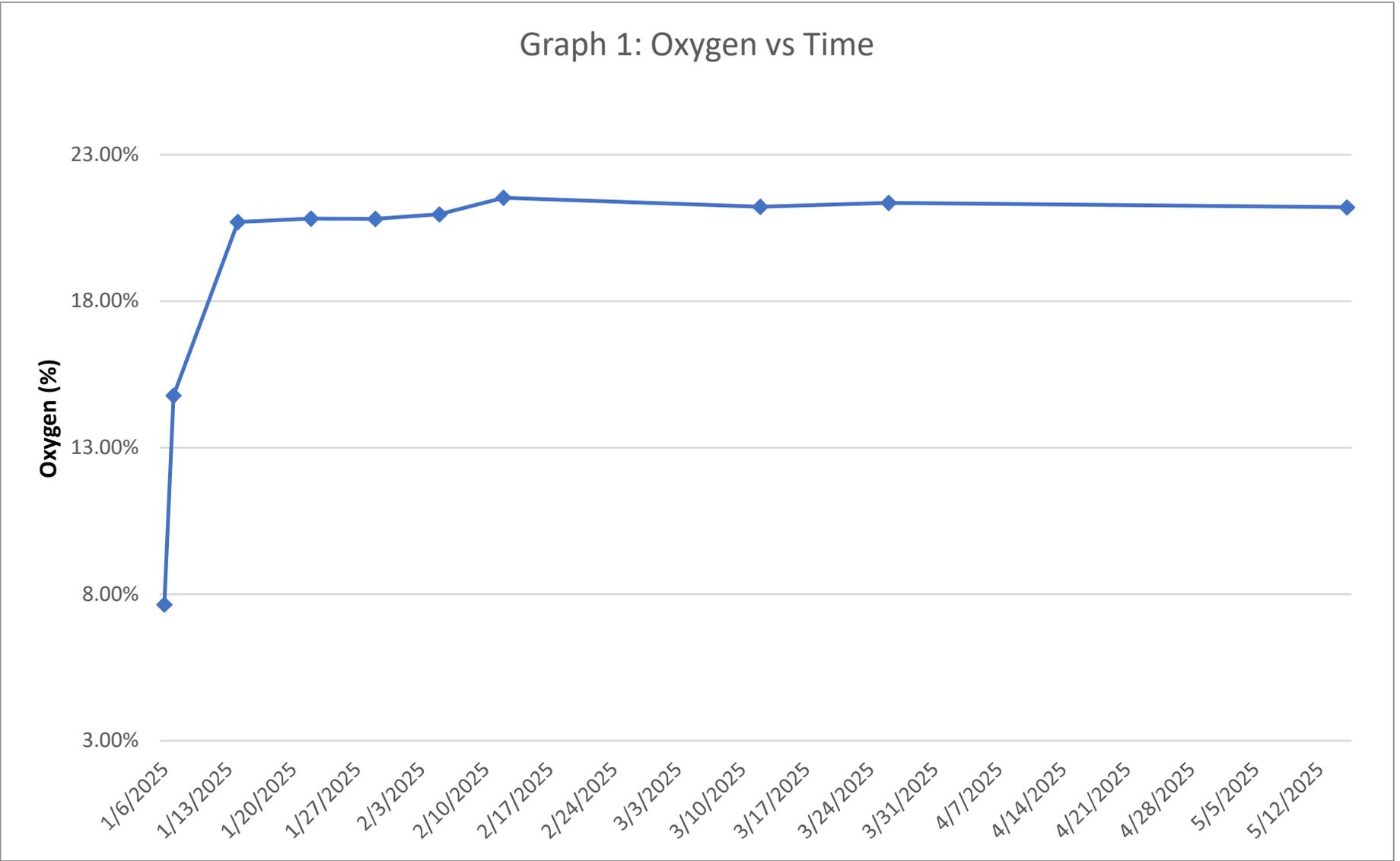
Date	Flow Rate (scfm)	Total System Flow (cf)	Delta Flow (cf)	Benzene (lb/hr)	Toluene (lb/hr)	Ethylbenzene (lb/hr)	Total Xylenes (lb/hr)	TVPH (lb/hr)
1/6/2025	134							
				System Startup				
1/7/2025 ⁽¹⁾	134	174,468	174,468	0.180	0.17	0.0165	0.148	24.1
1/14/2025	145	1,454,640	1,454,640	0.092	0.13	0.0119	0.104	11.6
1/22/2025	161	1,790,964	1,790,964	0.012	0.02	0.0018	0.011	1.48
1/29/2025	133	1,197,000	1,197,000	0.007	0.02	0.0023	0.018	1.37
2/5/2025	133	1,281,588	1,281,588	0.007	0.03	0.0030	0.030	1.69
2/12/2025	143	1,021,020	1,021,020	0.005	0.03	0.0027	0.020	1.34
3/12/2025	147	5,279,652	5,279,652	0.004	0.02	0.0027	0.009	0.87
3/26/2025	141	2,882,322	2,882,322	0.002	0.01	0.0026	0.017	0.70
5/15/2025	120	8,340,480	8,340,480	0.002	0.01	0.0021	0.026	1.01
Average				0.035	0.049	0.0051	0.043	4.90

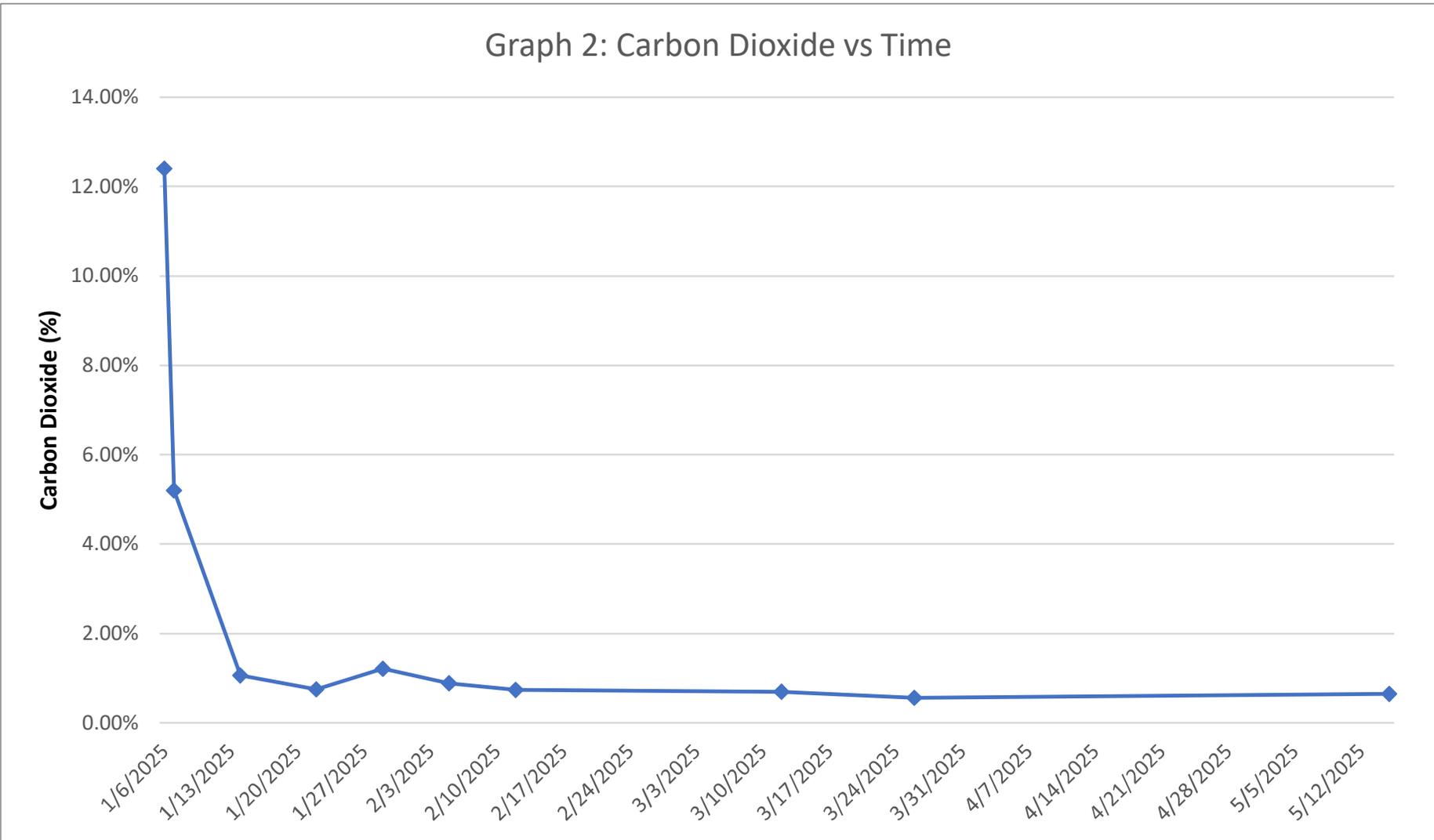
Mass Recovery

Date	Total Operational Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
1/6/2025	3.7							
			System Startup					
1/7/2025	25.4	22	3.9	3.8	0.36	3.2	522	0.26
1/14/2025	192.6	167	15.5	22	1.99	17	1,936	0.97
1/22/2025	378.0	185	2.2	4	0.3	2	274	0.14
1/29/2025	528.0	150	1.0	2.9	0.34	2.8	205	0.10
2/5/2025	688.6	161	1.1	5	0.5	4.8	272	0.14
2/12/2025	807.6	119	0.6	3	0.3	2	159	0.08
3/12/2025	1,406.2	599	2.3	11	1.6	5	520	0.26
3/26/2025	1,746.9	341	0.8	3	0.9	6	239	0.12
5/15/2025	2,905.3	1,158	2.3	16	2.4	30	1,170	0.58
Total Mass Recovery to Date			30	69	9	74	5,296	2.6

Notes:

- (1) Flow rate for 1/7/2025 estimated as the flow rate from the previous day
- cf: cubic feet
- scfm: cubic feet per minute
- µg/L: micrograms per liter
- lb/hr: pounds per hour
- PID: photoionization detector
- ppm: parts per million
- TVPH: total volatile petroleum hydrocarbons
- : not measured
- gray: laboratory reporting limit used for calculating emissions







APPENDIX A

Field Notes

UNIVERSAL

J M

LC KELLY #1E SVE SYSTEM
O&M FORM

DATE: 7-16
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

	Check/Date
WEEKLY MAINTENANCE:	Blower Bearing Grease
QUARTERLY MAINTENANCE:	Blower Oil Change

SVE SYSTEM	READING	TIME
Blower Hours (take photo)	<u>2208.9</u>	<u>1046</u>
Inlet Vacuum (IHG)	<u>5.1</u>	
Differential Pressure (IWC)	<u>0.22</u>	
Inlet PID	<u>586.7</u>	
Exhaust PID	<u>778.3</u>	
Inlet Temperature		
K/O Tank Liquid Level		
K/O Liquid Drained (gallons)		

SVE SYSTEM SAMPLING

SAMPLE ID:	SAMPLE TIME:
Analytes:	Sample for TVPH (8015), BTEX (8260), Fixed Gas (CO2 AND O2)
OPERATING WELLS	

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	DIFF PRESSURE (IN.W.G.)	OXYGEN (%)	CARBON DIOXIDE (%)
SVE01	<u>68.1</u>	<u>121.9</u>		<u>17.1</u>	<u>1.7</u>
SVE02	<u>58.1</u>	<u>545.8</u>		<u>20.0</u>	<u>0.3</u>
SVE03	<u>60.4</u>	<u>357.0</u>		<u>20.9</u>	<u>0.0</u>
SVE04	<u>67.6</u>	<u>256.8</u>		<u>18.7</u>	<u>1.3</u>
SVE05	<u>30.5</u>	<u>626.8</u>		<u>20.3</u>	<u>0.6</u>
SVE06	<u>16.95</u>	<u>434.6</u>		<u>20.9</u>	<u>0.9</u>
SVE07	<u>58.9</u>	<u>350.3</u>		<u>19.1</u>	<u>1.4</u>
SVE08	<u>42.2</u>	<u>206.9</u>		<u>19.1</u>	<u>1.0</u>
SVE09	<u>61.7</u>	<u>274.8</u>		<u>20.4</u>	<u>0.4</u>
SVE10	<u>67.9</u>	<u>434.8</u>		<u>16.2</u>	<u>4.1</u>
SVE11	<u>51.9</u>	<u>225.4</u>		<u>20.9</u>	<u>0.3</u>

COMMENTS/OTHER MAINTENANCE:

~~Heating method for polylines~~
 • Well caps on risers? Need Tee's
 • Manifold measurements

Well ID	Vac	Flow	Liquid
1	1.0	13	N
2	0	0	
3	5.0	14	
4	3.0	opaque	
5	1.0	16	
6	6.5	7.5	
7	6.5	17	
8	3.75	6.0	
9	5.0	5.0	
10	7.25	4.0	
11	6.5	4.5	



LC KELLY #1E SVE SYSTEM
O&M FORM

DATE: 4-25
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

	Check/Date
WEEKLY MAINTENANCE: Blower Bearing Grease	<input checked="" type="checkbox"/>
QUARTERLY MAINTENANCE: Blower Oil Change	<input type="checkbox"/>

SVE SYSTEM	READING	TIME
Blower Hours (take photo)	<u>2425.9</u>	<u>1152</u>
Inlet Vacuum (IHG)	<u>4.3</u>	
Differential Pressure (IWC)	<u>0.32</u>	
Inlet PID	<u>571.5</u>	
Exhaust PID	<u>520.7</u>	
Inlet Temperature		
K/O Tank Liquid Level		
K/O Liquid Drained (gallons)		

SVE SYSTEM SAMPLING

SAMPLE ID:	SAMPLE TIME:
Analytes: Sample for TVPH (8015), BTEX (8260), Fixed Gas (CO2 AND O2)	
OPERATING WELLS	

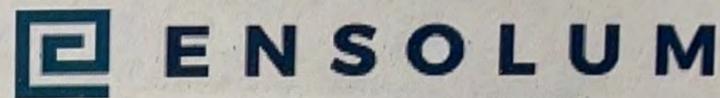
Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	DIFF PRESSURE (IN W.C.)	OXYGEN (%)	CARBON DIOXIDE (%)
SVE01	<u>67.5</u>	<u>1141</u>		<u>17.7</u>	<u>1.5</u>
SVE02	<u>56.7</u>	<u>730.1</u>		<u>20.7</u>	<u>0.0</u>
SVE03	<u>60.4</u>	<u>339.3</u>		<u>20.9</u>	<u>0.0</u>
SVE04	<u>66.9</u>	<u>607.7</u>		<u>18.4</u>	<u>1.3</u>
SVE05	<u>29.9</u>	<u>447.8</u>		<u>20.3</u>	<u>0.4</u>
SVE06	<u>16.77</u>	<u>559.7</u>		<u>20.3</u>	<u>0.1</u>
SVE07	<u>58.2</u>	<u>360.1</u>		<u>18.9</u>	<u>1.0</u>
SVE08	<u>41.0</u>	<u>190.5</u>		<u>18.6</u>	<u>0.8</u>
SVE09	<u>62.3</u>	<u>216.3</u>		<u>20.9</u>	<u>0.0</u>
SVE10	<u>67.4</u>	<u>968.4</u>		<u>16.1</u>	<u>2.9</u>
SVE11	<u>53.0</u>	<u>253.1</u>		<u>20.5</u>	<u>0.1</u>

COMMENTS/OTHER MAINTENANCE:

Well ID	Vac	Flow
1	<u>4.5</u>	<u>13</u>
2	<u>4.25</u>	<u>31</u>
3	<u>4.0</u>	<u>12</u>
4	<u>2.5</u>	<u>opaque</u>
5	<u>2.0</u>	<u>15</u>
6	<u>6.25</u>	<u>7.5</u>
7	<u>5.75</u>	<u>14</u>
8	<u>3.25</u>	<u>5.0</u>
9	<u>4.25</u>	<u>4.0</u>
10	<u>6.25</u>	<u>4.0</u>
11	<u>6.0</u>	<u>5.0</u>



LC KELLY #1E SVE SYSTEM
O&M FORM

DATE: 5-15
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: _____ KO TANK HIGH LEVEL

	Check/Date
WEEKLY MAINTENANCE: Blower Bearing Grease	✓
QUARTERLY MAINTENANCE: Blower Oil Change	

SVE SYSTEM	READING	TIME
Blower Hours (take photo)	2405.3	1110
Inlet Vacuum (IHG)	4.75	
Differential Pressure (IWC)	0.27	
Inlet PID	409.5	
Exhaust PID	922.8	
Inlet Temperature		
K/O Tank Liquid Level		
K/O Liquid Drained (gallons)		

SVE SYSTEM SAMPLING

SAMPLE ID: <u>SVE-1</u>	SAMPLE TIME: <u>1130</u>
Analytes: Sample for TVPH (8015), BTEX (8260), Fixed Gas (CO2 AND O2)	
OPERATING WELLS	

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	DIFF PRESSURE (IN W.C.)	OXYGEN (%)	CARBON DIOXIDE (%)
SVE01	67.5	809.3			
SVE02	56.4	601.6			
SVE03	60.4	234.5			
SVE04	67.2	485.8			
SVE05	30.3	582.8			
SVE06	17.07	546.4			
SVE07	58.3	399.5			
SVE08	42.0	180.6			
SVE09	62.5	215.8			
SVE10	66.3	711.4			
SVE11	47.3	179.0			

COMMENTS/OTHER MAINTENANCE:

Gas meter malfunctioning

Well ID	Vac	Flow
1	4.5	13
2	4.25	31
3	4.0	13
4	2.5	opaque
5	2.0	14
6	6.25	7.5
7	6.0	13
8	3.5	5.5
9	4.5	3.0
10	6.5	3.0
11	6.0	4.0

LC KELLY #1E SVE SYSTEM
O&M FORM

DATE: 5-20
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

SVE ALARMS:	<u>KO TANK HIGH LEVEL</u>
	Check/Date
WEEKLY MAINTENANCE:	Blower Bearing Grease <input checked="" type="checkbox"/>
QUARTERLY MAINTENANCE:	Blower Oil Change <input type="checkbox"/>

SVE SYSTEM	READING	TIME
Blower Hours (take photo)	<u>3025.5</u>	<u>1404</u>
Inlet Vacuum (IHG)	<u>4.75</u>	
Differential Pressure (IWC)	<u>30</u>	
Inlet PID	<u>387.4</u>	
Exhaust PID	<u>708.3</u>	
Inlet Temperature		
K/O Tank Liquid Level		
K/O Liquid Drained (gallons)		

SVE SYSTEM SAMPLING

SAMPLE ID:	SAMPLE TIME:
Analytes:	Sample for TVPH (8015), BTEX (8260), Fixed Gas (CO2 AND O2)
OPERATING WELLS	

Change in Well Operation: _____

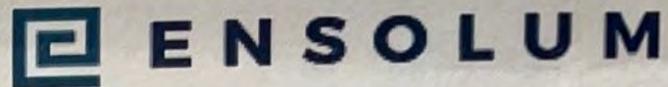
WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	DIFF PRESSURE (IN W.C.)	OXYGEN (%)	CARBON DIOXIDE (%)
SVE01	<u>67.5</u>	<u>953.2</u>			
SVE02	<u>56.7</u>	<u>692.8</u>			
SVE03	<u>60.4</u>	<u>319.5</u>			
SVE04	<u>67.0</u>	<u>537.8</u>			
SVE05	<u>31.1</u>	<u>610.9</u>		<u>19.8</u>	<u>6.20</u>
SVE06	<u>17.03</u>	<u>473.7</u>			
SVE07	<u>58.2</u>	<u>376.4</u>			
SVE08	<u>41.3</u>	<u>168.9</u>			
SVE09	<u>62.4</u>	<u>272.6</u>			
SVE10	<u>67.4</u>	<u>721.6</u>			
SVE11	<u>52.1</u>	<u>210.3</u>			

COMMENTS/OTHER MAINTENANCE:

Gas meter malfunctioning

Well ID	Vac	Flow
1	<u>4.75</u>	<u>13</u>
2	<u>4.5</u>	<u>31</u>
3	<u>4.25</u>	<u>14</u>
4	<u>2.5</u>	<u>opaque</u>
5	<u>2.0</u>	<u>14</u>
6	<u>6.25</u>	<u>7.5</u>
7	<u>6.0</u>	<u>15</u>
8	<u>3.5</u>	<u>6.0</u>
9	<u>4.5</u>	<u>4.0</u>
10	<u>6.5</u>	<u>4.0</u>
11	<u>5.75</u>	<u>4.0</u>



LC KELLY #1E SVE SYSTEM
O&M FORM

DATE: 6-17
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

	Check/Date
WEEKLY MAINTENANCE: Blower Bearing Grease	<input checked="" type="checkbox"/>
QUARTERLY MAINTENANCE: Blower Oil Change	<input type="checkbox"/>

SVE SYSTEM	READING	TIME
Blower Hours (take photo)	3626.6	1502
Inlet Vacuum (IHG)	4.75	
Differential Pressure (IWC)	0.30	
Inlet PID	357.9	
Exhaust PID	892.8	
Inlet Temperature		
K/O Tank Liquid Level		
K/O Liquid Drained (gallons)		

SVE SYSTEM SAMPLING

SAMPLE ID:	SAMPLE TIME:
Analytes:	Sample for TVPH (8015), BTEX (8260), Fixed Gas (CO2 AND O2)
OPERATING WELLS	

Change in Well Operation: _____

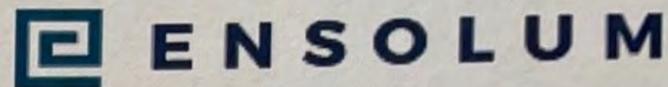
WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IN W.C.)	PID HEADSPACE (PPM)	VACUUM (IHG)	FLOW (ACFM)	OXYGEN (%)	CARBON DIOXIDE (%)
SVE01	68.5	670.1			18.5	X
SVE02	60.6	388.8			20.5	2980
SVE03	61.1	255.9			20.9	1780
SVE04	64.0	368.3			19.0	X
SVE05	34.0	375.1			20.3	9080
SVE06	16.65	342.2			20.2	4380
SVE07	62.5	306.8			19.2	X
SVE08	42.8	154.0			19.1	X
SVE09	63.7	114.2			20.4	1720
SVE10	65.8	430.1			19.7	X
SVE11	47.1	173.1			20.9	3940

COMMENTS/OTHER MAINTENANCE:

* over 10,000 ppm

Well ID	Vac	Flow
1	4.75	13
2	4.5	31
3	4.25	13
4	2.5	opaque
5	2.25	14
6	6.25	7.5
7	6.e	14
8	3.5	5.5
9	5.0	4.0
10	6.25	3.5
11	6.0	4.0



LC KELLY #1E SVE SYSTEM
O&M FORM

DATE: 6-30
TIME ONSITE: _____

O&M PERSONNEL: B Sinclair
TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

WEEKLY MAINTENANCE:	Blower Bearing Grease	Check/Date <input checked="" type="checkbox"/>
QUARTERLY MAINTENANCE:	Blower Oil Change	

SVE SYSTEM	READING	TIME
Blower Hours (take photo)	<u>3917.8</u>	<u>1133</u>
Inlet Vacuum (IHG)	<u>4.75</u>	
Differential Pressure (IWC)	<u>0.30</u>	
Inlet PID	<u>395.2</u>	
Exhaust PID	<u>812.4</u>	
Inlet Temperature		
K/O Tank Liquid Level		
K/O Liquid Drained (gallons)		

SVE SYSTEM SAMPLING

SAMPLE ID:	SAMPLE TIME:
Analytes:	Sample for TVPH (8015), BTEX (8260), Fixed Gas (CO2 AND O2)
OPERATING WELLS	

Change in Well Operation: _____

WELLHEAD MEASUREMENTS

WELL ID	VACUUM (IN W.C.)	PID HEADSPACE (PPM)	VACUUM (IHG)	FLOW (ACFM)	OXYGEN (%)	CARBON DIOXIDE (%)
SVE01	<u>67.8</u>	<u>729.8</u>			<u>18.9</u>	<u>*</u>
SVE02	<u>59.5</u>	<u>352.1</u>			<u>20.6</u>	<u>3020</u>
SVE03	<u>60.9</u>	<u>310.2</u>			<u>20.4</u>	<u>1240</u>
SVE04	<u>67.8</u>	<u>352.5</u>			<u>19.2</u>	<u>*</u>
SVE05	<u>31.4</u>	<u>424.7</u>			<u>20.1</u>	<u>8820</u>
SVE06	<u>16.67</u>	<u>296.7</u>			<u>20.7</u>	<u>9160</u>
SVE07	<u>59.7</u>	<u>332.5</u>			<u>19.7</u>	<u>*</u>
SVE08	<u>41.9</u>	<u>147.3</u>			<u>19.3</u>	<u>*</u>
SVE09	<u>63.6</u>	<u>121.2</u>			<u>20.9</u>	<u>1300</u>
SVE10	<u>65.6</u>	<u>490.3</u>			<u>19.7</u>	<u>*</u>
SVE11	<u>50.3</u>	<u>148.6</u>			<u>20.9</u>	<u>4040</u>

ppm

COMMENTS/OTHER MAINTENANCE:

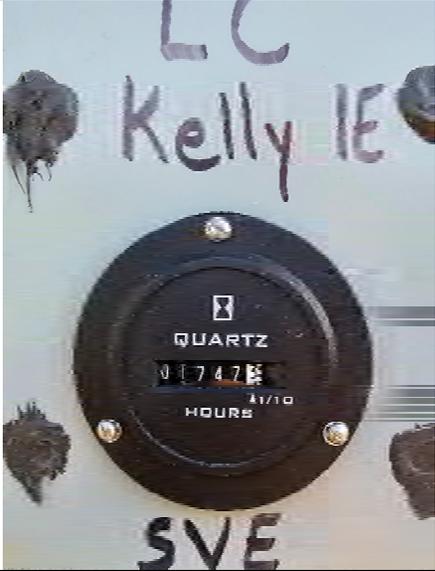
* over 10,000 ppm

Well ID	Vac	Flow
1	4.5	13
2	4.5	31
3	4.25	14
4	2.5	opaque
5	2.0	14
6	6.25	7.5
7	6.25	15
8	3.5	5.5
9	5.0	4.0
10	6.5	4.0
11	5.75	4.0



APPENDIX B
Project Photographs

PROJECT PHOTOGRAPHS
LC Kelly 1E
San Juan County, New Mexico
Hilcorp Energy Company

<p>Photograph 1</p> <p>Runtime meter taken on March 26, 2025 at 12:00 PM Hours = 1,746.9</p>	
<p>Photograph 2</p> <p>Runtime meter taken on June 30, 2025 at 11:33 AM Hours = 3,917.8</p>	 <p>DIRECTION 173 deg(T) 36.84596°N 108.12477°W ACCURACY 4 m DATUM WGS84</p> <p>2025-06-30 11:33:36-06:00</p>



APPENDIX C

Laboratory Analytical Reports



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/27/2025 12:10:20 PM

JOB DESCRIPTION

LC Kelly 1E

JOB NUMBER

885-25103-1

Eurofins Albuquerque
 4901 Hawkins NE
 Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

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

Authorization



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Designee for
Michelle Garcia, Project Manager
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(505)345-3975

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Laboratory Job ID: 885-25103-1

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Definitions/Glossary

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: LC Kelly 1E

Job ID: 885-25103-1

Job ID: 885-25103-1

Eurofins Albuquerque

Job Narrative 885-25103-1

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 5/17/2025 7:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.0°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.

GC/MS VOA

Method 8260B: The continuing calibration verification (CCV) associated with batch 885-26862 recovered above the upper control limit for 2,2-Dichloropropane and Bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Gasoline Range Organics

Method 8015D_GRO: Surrogate recovery for the following sample was outside control limits: SVE-1 (885-25103-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: LC Kelly 1E

Job ID: 885-25103-1

Client Sample ID: SVE-1

Lab Sample ID: 885-25103-1

Date Collected: 05/15/25 11:30

Matrix: Air

Date Received: 05/17/25 07:00

Sample Container: Tedlar Bag 1L

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	ug/L			05/23/25 13:10	5
1,1,1-Trichloroethane	ND		0.50	ug/L			05/23/25 13:10	5
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			05/23/25 13:10	5
1,1,2-Trichloroethane	ND		0.50	ug/L			05/23/25 13:10	5
1,1-Dichloroethane	ND		0.50	ug/L			05/23/25 13:10	5
1,1-Dichloroethene	ND		0.50	ug/L			05/23/25 13:10	5
1,1-Dichloropropene	ND		0.50	ug/L			05/23/25 13:10	5
1,2,3-Trichlorobenzene	ND		0.50	ug/L			05/23/25 13:10	5
1,2,3-Trichloropropane	ND		1.0	ug/L			05/23/25 13:10	5
1,2,4-Trichlorobenzene	ND		0.50	ug/L			05/23/25 13:10	5
1,2,4-Trimethylbenzene	2.0		0.50	ug/L			05/23/25 13:10	5
1,2-Dibromo-3-Chloropropane	ND		1.0	ug/L			05/23/25 13:10	5
1,2-Dibromoethane (EDB)	ND		0.50	ug/L			05/23/25 13:10	5
1,2-Dichlorobenzene	ND		0.50	ug/L			05/23/25 13:10	5
1,2-Dichloroethane (EDC)	ND		0.50	ug/L			05/23/25 13:10	5
1,2-Dichloropropane	ND		0.50	ug/L			05/23/25 13:10	5
1,3,5-Trimethylbenzene	2.5		0.50	ug/L			05/23/25 13:10	5
1,3-Dichlorobenzene	ND		0.50	ug/L			05/23/25 13:10	5
1,3-Dichloropropane	ND		0.50	ug/L			05/23/25 13:10	5
1,4-Dichlorobenzene	ND		0.50	ug/L			05/23/25 13:10	5
1-Methylnaphthalene	ND		2.0	ug/L			05/23/25 13:10	5
2,2-Dichloropropane	ND		1.0	ug/L			05/23/25 13:10	5
2-Butanone	ND		5.0	ug/L			05/23/25 13:10	5
2-Chlorotoluene	ND		0.50	ug/L			05/23/25 13:10	5
2-Hexanone	ND		5.0	ug/L			05/23/25 13:10	5
2-Methylnaphthalene	ND		2.0	ug/L			05/23/25 13:10	5
4-Chlorotoluene	ND		0.50	ug/L			05/23/25 13:10	5
4-Isopropyltoluene	ND		0.50	ug/L			05/23/25 13:10	5
4-Methyl-2-pentanone	ND		5.0	ug/L			05/23/25 13:10	5
Acetone	ND		5.0	ug/L			05/23/25 13:10	5
Benzene	5.3		0.50	ug/L			05/23/25 13:10	5
Bromobenzene	ND		0.50	ug/L			05/23/25 13:10	5
Bromodichloromethane	ND		0.50	ug/L			05/23/25 13:10	5
Dibromochloromethane	ND		0.50	ug/L			05/23/25 13:10	5
Bromoform	ND		0.50	ug/L			05/23/25 13:10	5
Bromomethane	ND		1.5	ug/L			05/23/25 13:10	5
Carbon disulfide	ND		5.0	ug/L			05/23/25 13:10	5
Carbon tetrachloride	ND		0.50	ug/L			05/23/25 13:10	5
Chlorobenzene	ND		0.50	ug/L			05/23/25 13:10	5
Chloroethane	ND		1.0	ug/L			05/23/25 13:10	5
Chloroform	ND		0.50	ug/L			05/23/25 13:10	5
Chloromethane	ND		1.5	ug/L			05/23/25 13:10	5
cis-1,2-Dichloroethene	ND		0.50	ug/L			05/23/25 13:10	5
cis-1,3-Dichloropropene	ND		0.50	ug/L			05/23/25 13:10	5
Dibromomethane	ND		0.50	ug/L			05/23/25 13:10	5
Dichlorodifluoromethane	ND		0.50	ug/L			05/23/25 13:10	5
Ethylbenzene	4.6		0.50	ug/L			05/23/25 13:10	5
Hexachlorobutadiene	ND		0.50	ug/L			05/23/25 13:10	5

Eurofins Albuquerque

Client Sample Results

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

Client Sample ID: SVE-1

Lab Sample ID: 885-25103-1

Date Collected: 05/15/25 11:30

Matrix: Air

Date Received: 05/17/25 07:00

Sample Container: Tedlar Bag 1L

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.0		0.50	ug/L			05/23/25 13:10	5
Methyl-tert-butyl Ether (MTBE)	ND		0.50	ug/L			05/23/25 13:10	5
Methylene Chloride	ND		1.5	ug/L			05/23/25 13:10	5
n-Butylbenzene	ND		1.5	ug/L			05/23/25 13:10	5
N-Propylbenzene	0.75		0.50	ug/L			05/23/25 13:10	5
Naphthalene	ND		1.0	ug/L			05/23/25 13:10	5
sec-Butylbenzene	ND		0.50	ug/L			05/23/25 13:10	5
Styrene	ND		0.50	ug/L			05/23/25 13:10	5
tert-Butylbenzene	ND		0.50	ug/L			05/23/25 13:10	5
Tetrachloroethene (PCE)	ND		0.50	ug/L			05/23/25 13:10	5
Toluene	33		0.50	ug/L			05/23/25 13:10	5
trans-1,2-Dichloroethene	ND		0.50	ug/L			05/23/25 13:10	5
trans-1,3-Dichloropropene	ND		0.50	ug/L			05/23/25 13:10	5
Trichloroethene (TCE)	ND		0.50	ug/L			05/23/25 13:10	5
Trichlorofluoromethane	ND		0.50	ug/L			05/23/25 13:10	5
Vinyl chloride	ND		0.50	ug/L			05/23/25 13:10	5
Xylenes, Total	59		0.75	ug/L			05/23/25 13:10	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 130		05/23/25 13:10	5
Toluene-d8 (Surr)	128		70 - 130		05/23/25 13:10	5
4-Bromofluorobenzene (Surr)	118		70 - 130		05/23/25 13:10	5
Dibromofluoromethane (Surr)	87		70 - 130		05/23/25 13:10	5

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	2500		50	ug/L			05/21/25 12:54	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	15 - 150		05/21/25 12:54	10

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

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

Lab Sample ID: MB 885-26862/5

Matrix: Air

Analysis Batch: 26862

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			05/23/25 12:45	1
1,1,1-Trichloroethane	ND		0.10	ug/L			05/23/25 12:45	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			05/23/25 12:45	1
1,1,2-Trichloroethane	ND		0.10	ug/L			05/23/25 12:45	1
1,1-Dichloroethane	ND		0.10	ug/L			05/23/25 12:45	1
1,1-Dichloroethene	ND		0.10	ug/L			05/23/25 12:45	1
1,1-Dichloropropene	ND		0.10	ug/L			05/23/25 12:45	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			05/23/25 12:45	1
1,2,3-Trichloropropane	ND		0.20	ug/L			05/23/25 12:45	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			05/23/25 12:45	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			05/23/25 12:45	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			05/23/25 12:45	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			05/23/25 12:45	1
1,2-Dichlorobenzene	ND		0.10	ug/L			05/23/25 12:45	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			05/23/25 12:45	1
1,2-Dichloropropane	ND		0.10	ug/L			05/23/25 12:45	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			05/23/25 12:45	1
1,3-Dichlorobenzene	ND		0.10	ug/L			05/23/25 12:45	1
1,3-Dichloropropane	ND		0.10	ug/L			05/23/25 12:45	1
1,4-Dichlorobenzene	ND		0.10	ug/L			05/23/25 12:45	1
1-Methylnaphthalene	ND		0.40	ug/L			05/23/25 12:45	1
2,2-Dichloropropane	ND		0.20	ug/L			05/23/25 12:45	1
2-Butanone	ND		1.0	ug/L			05/23/25 12:45	1
2-Chlorotoluene	ND		0.10	ug/L			05/23/25 12:45	1
2-Hexanone	ND		1.0	ug/L			05/23/25 12:45	1
2-Methylnaphthalene	ND		0.40	ug/L			05/23/25 12:45	1
4-Chlorotoluene	ND		0.10	ug/L			05/23/25 12:45	1
4-Isopropyltoluene	ND		0.10	ug/L			05/23/25 12:45	1
4-Methyl-2-pentanone	ND		1.0	ug/L			05/23/25 12:45	1
Acetone	ND		1.0	ug/L			05/23/25 12:45	1
Benzene	ND		0.10	ug/L			05/23/25 12:45	1
Bromobenzene	ND		0.10	ug/L			05/23/25 12:45	1
Bromodichloromethane	ND		0.10	ug/L			05/23/25 12:45	1
Dibromochloromethane	ND		0.10	ug/L			05/23/25 12:45	1
Bromoform	ND		0.10	ug/L			05/23/25 12:45	1
Bromomethane	ND		0.30	ug/L			05/23/25 12:45	1
Carbon disulfide	ND		1.0	ug/L			05/23/25 12:45	1
Carbon tetrachloride	ND		0.10	ug/L			05/23/25 12:45	1
Chlorobenzene	ND		0.10	ug/L			05/23/25 12:45	1
Chloroethane	ND		0.20	ug/L			05/23/25 12:45	1
Chloroform	ND		0.10	ug/L			05/23/25 12:45	1
Chloromethane	ND		0.30	ug/L			05/23/25 12:45	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			05/23/25 12:45	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			05/23/25 12:45	1
Dibromomethane	ND		0.10	ug/L			05/23/25 12:45	1
Dichlorodifluoromethane	ND		0.10	ug/L			05/23/25 12:45	1
Ethylbenzene	ND		0.10	ug/L			05/23/25 12:45	1
Hexachlorobutadiene	ND		0.10	ug/L			05/23/25 12:45	1

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

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

Lab Sample ID: MB 885-26862/5
Matrix: Air
Analysis Batch: 26862

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.10	ug/L			05/23/25 12:45	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			05/23/25 12:45	1
Methylene Chloride	ND		0.30	ug/L			05/23/25 12:45	1
n-Butylbenzene	ND		0.30	ug/L			05/23/25 12:45	1
N-Propylbenzene	ND		0.10	ug/L			05/23/25 12:45	1
Naphthalene	ND		0.20	ug/L			05/23/25 12:45	1
sec-Butylbenzene	ND		0.10	ug/L			05/23/25 12:45	1
Styrene	ND		0.10	ug/L			05/23/25 12:45	1
tert-Butylbenzene	ND		0.10	ug/L			05/23/25 12:45	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			05/23/25 12:45	1
Toluene	ND		0.10	ug/L			05/23/25 12:45	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			05/23/25 12:45	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			05/23/25 12:45	1
Trichloroethene (TCE)	ND		0.10	ug/L			05/23/25 12:45	1
Trichlorofluoromethane	ND		0.10	ug/L			05/23/25 12:45	1
Vinyl chloride	ND		0.10	ug/L			05/23/25 12:45	1
Xylenes, Total	ND		0.15	ug/L			05/23/25 12:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 130		05/23/25 12:45	1
Toluene-d8 (Surr)	87		70 - 130		05/23/25 12:45	1
4-Bromofluorobenzene (Surr)	84		70 - 130		05/23/25 12:45	1
Dibromofluoromethane (Surr)	108		70 - 130		05/23/25 12:45	1

Lab Sample ID: LCS 885-26862/4
Matrix: Air
Analysis Batch: 26862

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	20.0	22.2		ug/L		111	70 - 130
Benzene	20.0	21.8		ug/L		109	70 - 130
Chlorobenzene	20.0	20.6		ug/L		103	70 - 130
Toluene	20.0	19.8		ug/L		99	70 - 130
Trichloroethene (TCE)	20.0	19.2		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
Toluene-d8 (Surr)	88		70 - 130
4-Bromofluorobenzene (Surr)	87		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130

Lab Sample ID: 885-25103-1 DU
Matrix: Air
Analysis Batch: 26862

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,1-Trichloroethane	ND		ND		ug/L		NC	20

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

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

Lab Sample ID: 885-25103-1 DU

Matrix: Air

Analysis Batch: 26862

Client Sample ID: SVE-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	ND		ND		ug/L		NC	20
1,1,2-Trichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethane	ND		ND		ug/L		NC	20
1,1-Dichloroethene	ND		ND		ug/L		NC	20
1,1-Dichloropropene	ND		ND		ug/L		NC	20
1,2,3-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,3-Trichloropropane	ND		ND		ug/L		NC	20
1,2,4-Trichlorobenzene	ND		ND		ug/L		NC	20
1,2,4-Trimethylbenzene	2.0		1.98		ug/L		1	20
1,2-Dibromo-3-Chloropropane	ND		ND		ug/L		NC	20
1,2-Dibromoethane (EDB)	ND		ND		ug/L		NC	20
1,2-Dichlorobenzene	ND		ND		ug/L		NC	20
1,2-Dichloroethane (EDC)	ND		ND		ug/L		NC	20
1,2-Dichloropropane	ND		ND		ug/L		NC	20
1,3,5-Trimethylbenzene	2.5		2.49		ug/L		1	20
1,3-Dichlorobenzene	ND		ND		ug/L		NC	20
1,3-Dichloropropane	ND		ND		ug/L		NC	20
1,4-Dichlorobenzene	ND		ND		ug/L		NC	20
1-Methylnaphthalene	ND		ND		ug/L		NC	20
2,2-Dichloropropane	ND		ND		ug/L		NC	20
2-Butanone	ND		ND		ug/L		NC	20
2-Chlorotoluene	ND		ND		ug/L		NC	20
2-Hexanone	ND		ND		ug/L		NC	20
2-Methylnaphthalene	ND		ND		ug/L		NC	20
4-Chlorotoluene	ND		ND		ug/L		NC	20
4-Isopropyltoluene	ND		ND		ug/L		NC	20
4-Methyl-2-pentanone	ND		ND		ug/L		NC	20
Acetone	ND		ND		ug/L		NC	20
Benzene	5.3		5.30		ug/L		0.2	20
Bromobenzene	ND		ND		ug/L		NC	20
Bromodichloromethane	ND		ND		ug/L		NC	20
Dibromochloromethane	ND		ND		ug/L		NC	20
Bromoform	ND		ND		ug/L		NC	20
Bromomethane	ND		ND		ug/L		NC	20
Carbon disulfide	ND		ND		ug/L		NC	20
Carbon tetrachloride	ND		ND		ug/L		NC	20
Chlorobenzene	ND		ND		ug/L		NC	20
Chloroethane	ND		ND		ug/L		NC	20
Chloroform	ND		ND		ug/L		NC	20
Chloromethane	ND		ND		ug/L		NC	20
cis-1,2-Dichloroethene	ND		ND		ug/L		NC	20
cis-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Dibromomethane	ND		ND		ug/L		NC	20
Dichlorodifluoromethane	ND		ND		ug/L		NC	20
Ethylbenzene	4.6		4.77		ug/L		3	20
Hexachlorobutadiene	ND		ND		ug/L		NC	20
Isopropylbenzene	1.0		1.03		ug/L		1	20
Methyl-tert-butyl Ether (MTBE)	ND		ND		ug/L		NC	20
Methylene Chloride	ND		ND		ug/L		NC	20

Eurofins Albuquerque

QC Sample Results

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

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

Lab Sample ID: 885-25103-1 DU
Matrix: Air
Analysis Batch: 26862

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
n-Butylbenzene	ND		ND		ug/L		NC	20
N-Propylbenzene	0.75		0.757		ug/L		0.8	20
Naphthalene	ND		ND		ug/L		NC	20
sec-Butylbenzene	ND		ND		ug/L		NC	20
Styrene	ND		ND		ug/L		NC	20
tert-Butylbenzene	ND		ND		ug/L		NC	20
Tetrachloroethene (PCE)	ND		ND		ug/L		NC	20
Toluene	33		33.4		ug/L		0.1	20
trans-1,2-Dichloroethene	ND		ND		ug/L		NC	20
trans-1,3-Dichloropropene	ND		ND		ug/L		NC	20
Trichloroethene (TCE)	ND		ND		ug/L		NC	20
Trichlorofluoromethane	ND		ND		ug/L		NC	20
Vinyl chloride	ND		ND		ug/L		NC	20
Xylenes, Total	59		60.3		ug/L		3	20

Surrogate	%Recovery	DU Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 130
Toluene-d8 (Surr)	130		70 - 130
4-Bromofluorobenzene (Surr)	121		70 - 130
Dibromofluoromethane (Surr)	86		70 - 130

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-26628/6
Matrix: Air
Analysis Batch: 26628

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			05/21/25 11:19	1

Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 150		05/21/25 11:19	1

Lab Sample ID: LCS 885-26628/4
Matrix: Air
Analysis Batch: 26628

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	50.0	40.8		ug/L		82	70 - 130

Surrogate	%Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	195		15 - 150

Eurofins Albuquerque

QC Association Summary

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

GC/MS VOA

Analysis Batch: 26862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25103-1	SVE-1	Total/NA	Air	8260B	
MB 885-26862/5	Method Blank	Total/NA	Air	8260B	
LCS 885-26862/4	Lab Control Sample	Total/NA	Air	8260B	
885-25103-1 DU	SVE-1	Total/NA	Air	8260B	

GC VOA

Analysis Batch: 26628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-25103-1	SVE-1	Total/NA	Air	8015D	
MB 885-26628/6	Method Blank	Total/NA	Air	8015D	
LCS 885-26628/4	Lab Control Sample	Total/NA	Air	8015D	

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Lab Chronicle

Client: Hilcorp Energy
Project/Site: LC Kelly 1E

Job ID: 885-25103-1

Client Sample ID: SVE-1

Lab Sample ID: 885-25103-1

Date Collected: 05/15/25 11:30

Matrix: Air

Date Received: 05/17/25 07:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		5	26862	CM	EET ALB	05/23/25 13:10
Total/NA	Analysis	8015D		10	26628	JP	EET ALB	05/21/25 12:54

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

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Accreditation/Certification Summary

Client: Hilcorp Energy
 Project/Site: LC Kelly 1E

Job ID: 885-25103-1

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	02-27-26

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
8015D		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-Dichloropropane
8260B		Air	Dibromochloromethane

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Hilcorp Energy
 Project/Site: LC Kelly 1E

Job ID: 885-25103-1

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
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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	02-26-26
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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
8015D		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: LC Kelly 1E

Job ID: 885-25103-1

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

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

Eurofins Albuquerque



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ANALYTICAL SUMMARY REPORT

May 23, 2025

Eurofins TestAmerica - Albuquerque

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

Work Order: B25051563 Quote ID: B15626

Project Name: LC Kelly 1E 88501698

Energy Laboratories Inc Billings MT received the following 1 sample for Eurofins TestAmerica - Albuquerque on 5/20/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25051563-001	SVE-1 (885-25103-1)	05/15/25 11:30	05/20/25	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond./1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

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

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

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

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

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Eurofins TestAmerica - Albuquerque
Project: LC Kelly 1E 88501698
Lab ID: B25051563-001
Client Sample ID: SVE-1 (885-25103-1)

Report Date: 05/23/25
Collection Date: 05/15/25 11:30
Date Received: 05/20/25
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.20	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Nitrogen	78.13	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Carbon Dioxide	0.65	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Hexanes plus	0.02	Mol %		0.01		GPA 2261-13	05/21/25 09:55 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj
Hexanes plus	0.008	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj
GPM Total	0.008	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj
GPM Pentanes plus	0.008	gpm		0.001		GPA 2261-13	05/21/25 09:55 / jrj

CALCULATED PROPERTIES

Gross BTU per cu ft @ Std Cond. (HHV)	1			1		GPA 2261-13	05/21/25 09:55 / jrj
Net BTU per cu ft @ std cond. (LHV)	1			1		GPA 2261-13	05/21/25 09:55 / jrj
Pseudo-critical Pressure, psia	547			1		GPA 2261-13	05/21/25 09:55 / jrj
Pseudo-critical Temperature, deg R	241			1		GPA 2261-13	05/21/25 09:55 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	05/21/25 09:55 / jrj
Air, %	96.87			0.01		GPA 2261-13	05/21/25 09:55 / 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)



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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25051563

Report Date: 05/23/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-13								Batch: R442830		
Lab ID: B25051566-001ADUP	12 Sample Duplicate					Run: GC7890_250521A		05/21/25 12:22		
Oxygen		21.3	Mol %	0.01				1.6	20	
Nitrogen		78.4	Mol %	0.01				0.4	20	
Carbon Dioxide		0.26	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		0.05	Mol %	0.01				0.0	20	
Lab ID: LCS052125								05/21/25 14:51		
	11 Laboratory Control Sample					Run: GC7890_250521A				
Oxygen		0.60	Mol %	0.01	122	70	130			
Nitrogen		6.15	Mol %	0.01	104	70	130			
Carbon Dioxide		0.98	Mol %	0.01	98	70	130			
Methane		76.2	Mol %	0.01	100	70	130			
Ethane		6.16	Mol %	0.01	102	70	130			
Propane		5.02	Mol %	0.01	101	70	130			
Isobutane		1.66	Mol %	0.01	83	70	130			
n-Butane		2.01	Mol %	0.01	101	70	130			
Isopentane		0.50	Mol %	0.01	100	70	130			
n-Pentane		0.51	Mol %	0.01	102	70	130			
Hexanes plus		0.21	Mol %	0.01	102	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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Work Order Receipt Checklist

Euofins TestAmerica - Albuquerque

B25051563

Login completed by: Crystal M. Jones

Date Received: 5/20/2025

Reviewed by: gmccartney

Received by: CMJ

Reviewed Date: 5/21/2025

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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 type="checkbox"/>	No <input checked="" 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:	18.7°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





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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

ICOC No:
885-4986

Containers

<u>Count</u>	<u>Container Type</u>	<u>Preservative</u>
1	Tedlar Bag 1L	None

Subcontract Method Instructions

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



Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-25103-1

Login Number: 25103

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.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	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	

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 485025

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 485025
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Created By	Condition	Condition Date
nvez	1. Continue O&M & sampling as stated in report. 2. Submit next quarterly report by October 15, 2025.	7/23/2025