



January 13, 2026

**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 Half 2025 – SVE System Update**

OH Randel #5  
San Juan County, New Mexico  
Hilcorp Energy Company  
NMOCD Incident Number: NVF1602039091

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Second Half 2025 – SVE System Update* report summarizing the soil vapor extraction (SVE) system performance at the OH Randel #5 natural gas production well (Site), located in Unit D of Section 10, Township 26 North, and Range 11 West in San Juan County, New Mexico (Figure 1). Specifically, this report summarizes Site activities performed in July, August, September, October, November, and December of 2025 to the New Mexico Oil Conservation Division (NMOCD).

**SVE SYSTEM SPECIFICATIONS**

The current operation at the Site consists of two SVE systems, each with a dedicated blower, knockout tank, and control panel. The original SVE system (“SVE Skid 1”) was installed at the Site in 2016 by XTO Energy (the previous owner and operator of the Site) and subsequently upgraded by Hilcorp in 2019. This SVE system consists of a 2 horsepower Atlantic Blower AB-301 blower capable of producing 110 standard cubic feet per minute (scfm) of flow and 72 inches of water column (IWC) vacuum. A second SVE system (“SVE Skid 2”) was installed at the Site and became operational on March 11, 2022, in order to more efficiently address residual soil impacts at the Site. Specifically, the new system was built with a 3.4 horsepower Republic Manufacturing HRC501 blower capable of producing 221 scfm of flow and 72 IWC vacuum. When operated concurrently, the two SVE systems are able to induce the necessary flow and vacuum on all SVE wells at the Site simultaneously without the need to cycle extraction on subsets of wells.

SVE wells are located and screened in the “Secondary” and “Tertiary” Source Zones, as identified in the WSP USA Inc. *Site Summary Report*, dated October 1, 2021. Once the new SVE Skid 2 was installed at the Site, new manifolds were constructed so SVE Skid 1 operated wells located in the Secondary Source Zone (SVE-5, SVE-8, and SVE-9) and Tertiary Zone (SVE-7, SVE-10, and SVE-12). SVE Skid 2 operated wells located in the Tertiary Source Zone (SVE-13, SVE-14, SVE-15, SVE-16, SVE-17, SVE-18, SVE-19, SVE-20, SVE-21, and SVE-22). SVE wells SVE-6 and SVE-11 are screened at depths shallower than the remaining soil impacts at the Site and have been turned off in order for the SVE system to induce a higher flow and vacuum on the remaining open wells. However, in the first quarter of 2024, the number of wells operating on each of the two skids were balanced and wells SVE-5,

SVE-7, SVE-8, SVE-9, SVE-10, and SVE-12 were taken offline. The SVE well locations are shown on Figure 2.

## SECOND HALF 2025 ACTIVITIES

During the second half of 2025, Ensolum and Hilcorp personnel performed bi-weekly operation and maintenance (O&M) visits to verify the system was operating as designed and to perform any required maintenance. Field notes taken during O&M visits are presented in Appendix A.

Between June 24 and December 29, 2025, SVE Skid 1 operated for 4,439 hours with a runtime efficiency of 98.4 percent (%) and Skid 2 operated for 4,496 hours with a runtime efficiency of 99.6%. Table 1 presents the SVE system operational hours and percentage runtime. Appendix B presents photographs of the runtime meter for calculating the second half of 2025 runtime efficiency.

Vapor samples were collected quarterly from sample ports located between the SVE piping manifold and the SVE blower using a high vacuum air sampler. Prior to collection, the vapor samples were field screened with a photoionization detector (PID) for organic vapor monitoring (OVM). The second half of 2025 vapor samples were collected from both SVE skids on August 7 and November 17, 2025. The vapor samples were collected directly into two 1-Liter Tedlar<sup>®</sup> bags and submitted to Eurofins Environment Testing 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, volatile organic compounds (VOCs) following EPA Method 8260B, and fixed gas analysis of oxygen and carbon dioxide following Gas Processors Association (GPA) Method 2261. Table 2 presents a summary of analytical data collected during the second half of 2025 sampling events and from historical sampling events, with the full laboratory analytical reports included as Appendix C.

Vapor sample data and measured stack flow rates are used to estimate total mass recovered and estimated total emissions generated by the SVE systems (Tables 3 and 4). Based on these estimates, a total of 791,494 pounds (396 tons) of TVPH have been removed by the systems to date.

## RECOMMENDATIONS

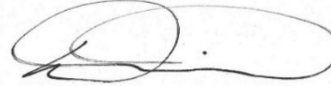
Monthly O&M visits, at a minimum, will continue to be performed by Ensolum and/or Hilcorp personnel to verify the SVE systems are operating within normal working ranges (i.e., temperature, pressure, and vacuum). Deviations from regular operations will be noted on field logs and included in the following semiannual report, per the conditions issued by the NMOCD on April 9, 2024. Hilcorp will continue operating the SVE systems until asymptotic mass removal rates are observed. At that time, an evaluation of residual petroleum hydrocarbons will be assessed and further recommendations for remedial actions, if any, will be provided to NMOCD.

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 WY, 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:**

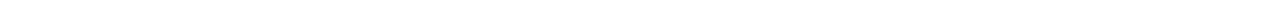
Figure 1 Site Location Map  
Figure 2 SVE System Layout

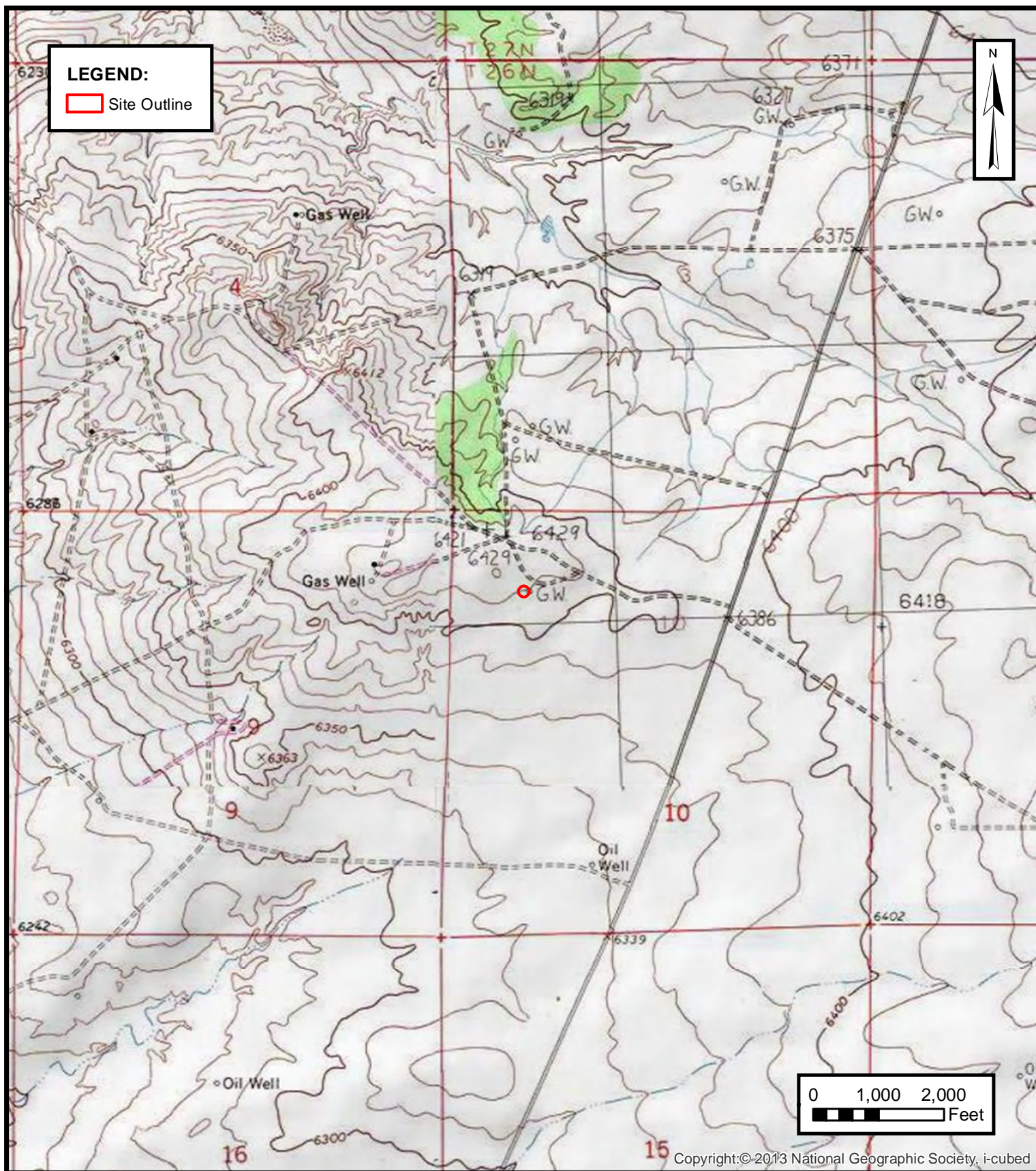
Table 1 Soil Vapor Extraction System Runtime Calculations  
Table 2 Soil Vapor Extraction System Emissions Analytical Results  
Table 3 Soil Vapor Extraction System Mass Removal and Emissions – Skid 1  
Table 4 Soil Vapor Extraction System Mass Removal and Emissions – Skid 2

Appendix A Field Notes  
Appendix B Project Photographs  
Appendix C Laboratory Analytical Reports



Figures





Copyright:© 2013 National Geographic Society, i-cubed



**SITE LOCATION MAP**

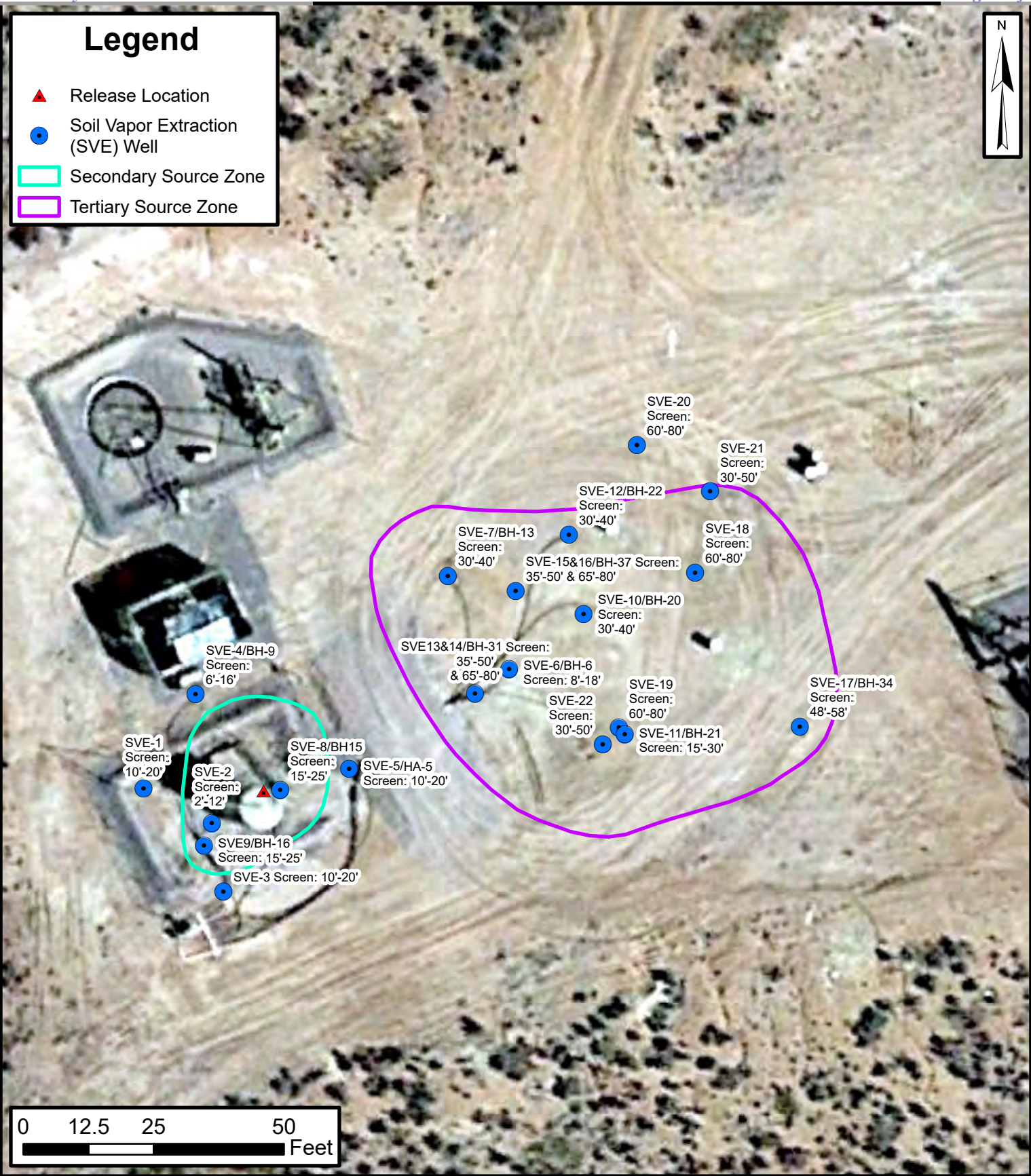
HILCORP ENERGY COMPANY  
 OH RANDEL #5  
 NWNW SEC 10 T26N R11W, San Juan County, New Mexico  
 36.506504° N, 107.996993° W

PROJECT NUMBER: 07A1988025

**FIGURE**  
**1**

# Legend

- ▲ Release Location
- Soil Vapor Extraction (SVE) Well
- Secondary Source Zone
- Tertiary Source Zone



Default Folder: C:\Users\Greg Palese\OneDrive - ENSOLUM, LLC\Desktop\Ensolum GIS1 - Durango\Hilcorp\OH Randel #5



## SVE System Layout

HILCORP ENERGY COMPANY  
OH RANDEL #5

NWNW SEC 10 T26N R11W, San Juan County, New Mexico  
36.506504° N, 107.996993° W

FIGURE

2



Tables





**TABLE 1**  
**SOIL VAPOR EXTRACTION SYSTEM RUNTIME CALCULATIONS**  
 OH Randel #5  
 Hilcorp Energy Company  
 San Juan County, New Mexico

**SVE Skid 1 - Original System Runtime Operation**

Date	Total Operational Hours	Delta Hours	Available Runtime Days	Percent Runtime
6/24/2025	59,567.83	--	--	--
12/29/2025	64,006.56	4,439	188	98.4%

**SVE Skid 2 - New System Runtime Operation**

Date	Total Operational Hours	Delta Hours	Available Runtime Days	Percent Runtime
6/24/2025	28,155.2	--	--	--
12/29/2025	32,651.2	4,496	188	99.6%



**TABLE 2**  
**SOIL VAPOR EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS**  
 OH Randel #5  
 Hilcorp Energy Company  
 San Juan County, New Mexico

**SVE Skid 1 - Original System Analytical Results**

Date	PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH/GRO (µg/L)	Oxygen (%)	Carbon Dioxide (%)
8/11/2016	4,072	160	1,700	61	500	46,000	--	--
8/17/2018	719	130	230	10	110	8,900	--	--
6/28/2019	1,257	7,200	15,000	360	3,000	460,000	--	--
12/16/2019	1,685	1,800	4,400	83	660	170,000	--	--
3/10/2020	897	1,700	3,300	89	700	130,000	--	--
4/30/2020	1,853	2,440	4,737	128	1,005	186,592	--	--
6/24/2020 <sup>(1)</sup>	--	--	--	--	--	--	--	--
11/10/2020	1,385	320	1,100	43	380	43,000	21.45%	0.35%
2/10/2021	865	360	950	35	250	32,000	--	--
6/11/2021	400	170	390	11	110	18,000	22.05%	0.15%
9/29/2021	505	99	190	7.0	55	8,200	--	--
12/15/2021	1,163	130	290	6.9	62	37,137	22.21%	0.092%
3/21/2022	274	6.5	23	0.98	11	550	22.38%	0.041%
6/17/2022	88	5.5	19	0.69	7.0	650	21.83%	0.060%
9/22/2022	55	9.0	42	1.9	20	670	21.84%	0.10%
12/7/2022	28	5.2	34	1.5	15	480	21.92%	0.05%
3/10/2023	87	2.5	8.2	<1.0	4.2	260	21.85%	0.06%
6/23/2023	290	4.8	31	2.0	24	670	21.82%	0.07%
8/21/2023	92	22	63	3.1	31	1,900	21.54%	0.13%
11/21/2023	235	2.6	9.6	<0.50	4.8	380	21.61%	0.12%
3/4/2024	1,897	330	600	45	350	43,000	20.65%	0.73%
6/11/2024	1,783	270	880 E	23	200	30,000	20.98%	0.70%
9/16/2024	1,316	1,500	3,300	140	1,100	15,000	18.79%	0.63%
11/18/2024	1,721	160	430	22	89	16,000	21.43%	0.46%
2/8/2025	--	76	190	8.3	73	8,600	21.50%	0.30%
5/19/2025	1,229	87	240	7.2	59	16,000	21.62%	0.33%
8/7/2025	782	60	170	<5.0	37	7,900	21.81%	0.22%
11/17/2025	937	61	140	<5.0	27	6,000	21.68%	0.26%

**SVE Skid 2 - New System Analytical Results**

Date	PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH (µg/L)	Oxygen (%)	Carbon Dioxide (%)
3/21/2022	1,354	310	510	13	120	35,000	21.81%	0.31%
6/17/2022	1,058	200	410	<10	66	33,000	21.27%	0.39%
9/8/2022	1,258	479	1,190	26	1,041	31,900	20.10%	0.50%
12/7/2022	918	230	370	9.1	65	18,000	21.53%	0.36%
3/10/2023	1,790	140	230	7.5	60	12,000	21.71%	0.17%
6/23/2023	1,450	160	430	12	100	18,000	21.29%	0.39%
8/21/2023	1,477	180	400	9.6	78	15,000	21.00%	0.40%
11/21/2023	1,352	160	420	9.5	72	15,000	21.21%	0.35%
3/4/2024	605	39	100	<5.0	18	3,400	21.82%	0.11%
6/11/2024	403	20	63	<5.0	14	2,000	21.27%	0.12%
9/16/2024	354	390	820	44	400	3,900	19.51%	0.15%
11/18/2024	841	48	140	<5.0	25	4,900	21.75%	0.15%
2/8/2025	--	29	84	<5.0	18	2,900	21.92%	0.12%
5/19/2025	415	26	69	<5.0	14	4,700	21.90%	0.13%
8/7/2025	473	32	110	<5.0	23	4,100	21.28%	0.11%
11/17/2025	523	36	110	<5.0	24	3,900	21.96%	0.12%

**Notes:**

- (1) - blower not operational for sampling in May and June 2020
- GRO: gasoline range organics
- µg/L: microgram per liter
- PID: photoionization detector
- ppm: parts per million
- TVPH: total volatile petroleum hydrocarbons
- %: percent
- : not sampled/analyzed
- <: gray indicates result less than the stated laboratory reporting limit (RL)
- E: result exceeded calibration range



**TABLE 3**  
**SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS - SKID 1**  
 OH Randel #5  
 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)
8/1/2016	4,072	160	1,700	61	500	46,000
8/17/2018	719	130	230	10	110	8,900
12/16/2019	1,902	1,800	4,400	83	660	170,000
3/10/2020	897	1,700	3,300	89	700	130,000
4/30/2020	1,853	2,440	4,737	128	1,005	186,592
6/24/2020 <sup>(1)</sup>	Blower Not Operational					
11/10/2021	1,385	320	1,100	43	380	43,000
2/10/2021	865	360	950	35	250	32,000
6/11/2021	400	170	390	11	110	18,000
9/29/2021	505	99	190	7.0	55	8,200
12/15/2021	1,163	130	290	6.9	62	37,137
3/21/2022	274	6.5	23	1.0	11	550
6/17/2022	88	5.5	19	0.7	7.0	650
9/22/2022	55	9.0	42	1.9	20	670
12/7/2022	28	5.2	34	1.5	15	480
3/10/2023	87	2.5	8.2	1.0	4.2	260
6/23/2023	290	4.8	31	2.0	24	670
8/21/2023	92	22	63	3.1	31	1,900
11/21/2023	235	2.6	9.6	0.50	4.8	380
3/4/2024	1,897	330	600	45	350	43,000
6/11/2024 <sup>(2)</sup>	1,783	270	880	23	200	30,000
9/16/2024	1,316	1,500	3,300	140	1,100	15,000
11/18/2024	1,721	160	430	22	89	16,000
2/8/2025	--	76	190	8.3	73	8,600
5/19/2025	1,229	87	240	7	59	16,000
8/7/2025	782	60	170	5.0	37	7,900
11/17/2025	937	61	140	5.0	27	6,000
<b>Average</b>	<b>983</b>	<b>381</b>	<b>903</b>	<b>29</b>	<b>226</b>	<b>31,842</b>

Vapor Extraction Summary								
Date	Flow Rate (cfm)	Total System Flow (cf)	Delta Flow (cf)	Benzene (lb/hr)	Toluene (lb/hr)	Ethylbenzene (lb/hr)	Total Xylenes (lb/hr)	TVPH (lb/hr)
8/1/2016	105	31,500	31,500	0.063	0.67	0.024	0.20	18
8/17/2018	100	59,647,500	59,616,000	0.054	0.36	0.013	0.11	10
12/16/2019	110	109,635,900	49,988,400	0.40	0.95	0.019	0.16	37
3/10/2020	110	121,707,300	12,071,400	0.72	1.6	0.035	0.28	62
4/30/2020 <sup>(1)</sup>	105	130,917,900	9,210,600	0.81	1.6	0.043	0.33	62
6/24/2020 <sup>(1)</sup>	Blower Not Operational							
11/10/2021	105	130,917,900	0	0	0	0	0	0
2/10/2021	92	143,580,780	12,662,880	0.12	0.35	0.013	0.11	13
6/11/2021	90	158,657,580	15,076,800	0.0892	0.2255	0.00774	0.0606	8.4
9/29/2021	69	168,249,960	9,592,380	0.0347	0.0748	0.00232	0.0213	3.4
12/15/2021	90	178,207,560	9,957,600	0.0385	0.0808	0.00234	0.0197	7.6
3/16/2022	70	187,343,904	9,136,344	0.0179	0.0410	0.00103	0.0096	4.9
6/17/2022	70	196,703,520	9,359,616	0.0016	0.0055	0.00022	0.0024	0.2
9/21/2022	65	205,627,890	8,924,370	0.0018	0.0074	0.00031	0.0033	0.2
12/7/2022	70	213,411,456	7,783,566	0.0019	0.0099	0.00045	0.0046	0.2
3/10/2023	73	223,160,241	9,748,785	0.0011	0.0058	0.00034	0.0026	0.1
6/23/2023	60	231,228,093	8,067,852	0.0008	0.0044	0.00034	0.0032	0.1
8/21/2023	62	236,382,227	5,154,134	0.0031	0.0109	0.00059	0.0064	0.3
11/21/2023	50	242,847,707	6,485,480	0.0023	0.0068	0.00034	0.0033	0.2
3/4/2024 <sup>(3)</sup>	24	246,402,333	3,554,626	0.0149	0.0274	0.00204	0.0159	1.9
6/11/2024 <sup>(3)</sup>	24	249,670,370	3,268,037	0.0269	0.0664	0.00305	0.0247	3.3
9/16/2024	31	253,412,113	3,741,743	0.1026	0.2423	0.00945	0.0754	2.6
11/18/2024	43	256,188,348	2,776,235	0.1335	0.2999	0.01303	0.0956	2.5
2/8/2025	52	262,207,546	6,019,198	0.0229	0.0603	0.00295	0.0158	2.4
5/19/2025	46	268,726,334	6,518,789	0.0140	0.0370	0.00133	0.0114	2.1
8/7/2025	50	274,381,784	5,655,450	0.0137	0.0383	0.00114	0.0090	2.2
11/17/2025	48	281,322,008	6,940,224	0.0109	0.0278	0.00090	0.0057	1.2
<b>Average</b>				<b>0.10</b>	<b>0.26</b>	<b>0.0076</b>	<b>0.061</b>	<b>9</b>

Mass Recovery								
Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
8/1/2016	5	5	0.31	3.3	0.12	1.0	90	0.045
8/17/2018	9,941	9,936	539	3,586	132	1,133	102,008	51
12/16/2019	17,515	7,574	3,007	7,214	145	1,200	278,728	139
3/10/2020	19,344	1,829	1,317	2,897	65	512	112,870	56
4/30/2020	20,806	1,462	1,188	2,307	62	489	90,884	45
6/24/2020 <sup>(1)</sup>	Blower Not Operational							
11/10/2021	20,806	0	0	0	0	0	0	0
2/10/2021	23,100	2,294	268	809	31	249	29,600	15
6/11/2021	25,892	2,792	249	630	22	169	23,495	12
9/29/2021	28,209	2,317	80	173	5.4	49	7,833	3.9
12/15/2021	30,053	1,844	71	149	4.3	36	14,070	7.0
3/16/2022	32,228	2,175	39	89	2.2	21	10,732	5.4
6/17/2022	34,457	2,228	3.5	12	0.49	5.3	350	0.18
9/21/2022	36,745	2,288	4.0	17	0.72	7.5	367	0.18
12/7/2022	38,598	1,853	3.4	18	0.82	8.5	279	0.14
3/10/2023	40,824	2,226	2.3	13	0.76	5.8	225	0.11
6/23/2023	43,065	2,241	1.8	10	0.75	7.1	234	0.12
8/21/2023	44,451	1,386	4.3	15	0.82	8.8	413	0.21
11/21/2023	46,606	2,155	5.0	15	0.73	7.2	459	0.23
3/4/2024	49,074	2,468	36.8	68	5.04	39.3	4,806	2.40
6/11/2024	51,344	2,269	61.1	151	6.93	56.0	7,436	3.72
9/16/2024	53,355	2,012	206.4	487	19.01	151.6	5,248	2.62
11/18/2024	54,432	1,076	143.6	323	14.02	102.9	2,682	1.34
2/8/2025	56,361	1,929	44.3	116	5.68	30.4	4,615	2.31
5/19/2025	58,723	2,362	33.1	87	3.15	26.8	4,998	2.50
8/7/2025	60,608	1,885	25.9	72	2.15	16.9	4,213	2.11
11/17/2025	63,018	2,410	26.2	67	2.16	13.8	3,007	1.50
<b>Total Mass Recovery to Date</b>			<b>7,361</b>	<b>19,329</b>	<b>532</b>	<b>4,347</b>	<b>709,643</b>	<b>355</b>

Notes:  
 (1): blower not operational for sampling in May and June 2020  
 (2): toluene result exceeded calibration range  
 (3): flow rate estimated based on previous data following reconfiguration  
 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  
 gray: Indicates result less than the stated laboratory reporting limit (RL); RL used for calculating emissions.



**TABLE 4**  
**SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS - SKID 2**  
 OH Randel #5  
 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)
3/21/2022	1,354	310	510	13	120	35,000
6/17/2022	1,058	200	410	10	66	33,000
9/8/2022	1,258	479	1,190	26	1,041	31,900
12/7/2022	918	230	370	9.0	65	18,000
3/10/2023	1,790	140	230	7.5	60	12,000
6/23/2023	1,450	160	430	12	100	18,000
8/21/2023	1,477	180	400	9.6	78	15,000
11/21/2023	1,352	160	420	9.5	72	15,000
3/4/2024	605	39	100	5.0	18	3,400
6/11/2024	403	20	63	5.0	14	2,000
9/16/2024	354	390	820	44	400	3,900
11/18/2024	841	48	140	5.0	25	4,900
2/8/2025	--	29	84	5.0	18	2,900
5/19/2025	415	26	69	5.0	14	4,700
8/7/2025	473	32	110	5.0	23	4,100
11/17/2025	523	36	110	5.0	24	3,900
<b>Average</b>	951	155	341	11	134	12,981

**Vapor Extraction Summary**

Date	Flow Rate (cfm)	Total System Flow (cf)	Delta Flow (cf)	Benzene (lb/hr)	Toluene (lb/hr)	Ethylbenzene (lb/hr)	Total Xylenes (lb/hr)	TVPH (lb/hr)
3/16/2022	70	499,800	499,800	0.081	0.134	0.0034	0.031	9.2
6/17/2022	60	8,533,560	8,033,760	0.057	0.103	0.0026	0.021	7.6
9/8/2022	56	15,138,648	6,605,088	0.071	0.168	0.0038	0.116	6.8
12/7/2022 <sup>(1)</sup>	56	22,499,736	7,361,088	0.074	0.163	0.0037	0.116	5.2
3/10/2023	58	30,214,896	7,715,160	0.040	0.065	0.0018	0.014	3.3
6/23/2023	64	37,670,256	7,455,360	0.036	0.079	0.0023	0.019	3.6
8/21/2023	51	42,004,746	4,334,490	0.032	0.079	0.0021	0.017	3.1
11/21/2023	52	48,892,458	6,887,712	0.033	0.080	0.0019	0.015	2.9
3/4/2024 <sup>(2)</sup>	43	55,189,464	6,297,006	0.016	0.042	0.0012	0.007	1.5
6/11/2024 <sup>(2)</sup>	43	61,302,774	6,113,310	0.005	0.013	0.0008	0.003	0.4
9/16/2024	48	67,983,222	6,680,448	0.037	0.079	0.0044	0.037	0.5
11/18/2024	44	71,982,822	3,999,600	0.036	0.079	0.0040	0.035	0.7
2/8/2025	44	77,165,142	5,182,320	0.006	0.018	0.0008	0.004	0.6
5/19/2025	50	85,640,742	8,475,600	0.005	0.014	0.0009	0.003	0.7
8/7/2025	58	90,820,026	5,179,284	0.006	0.019	0.0011	0.004	1.0
11/17/2025	60	99,597,546	8,777,520	0.008	0.025	0.0011	0.005	0.9
<b>Average</b>				0.034	0.07	0.0022	0.028	3.0

**Mass Recovery**

Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
3/16/2022	119	119	10	16	0.41	3.7	1,090	0.55
6/17/2022	2,351	2,232	128	230	5.8	47	17,027	8.5
9/8/2022	4,316	1,966	140	329	7.4	228	13,361	6.7
12/7/2022 <sup>(1)</sup>	6,507	2,191	163	358	8.0	254	11,448	5.7
3/10/2023	8,724	2,217	89	144	4.0	30	7,214	3.6
6/23/2023	10,666	1,942	70	153	4.5	37	6,971	3.5
8/21/2023	12,082	1,417	46	112	2.9	24	4,458	2.2
11/21/2023	14,290	2,208	73	176	4.1	32	6,440	3.2
3/4/2024	16,731	2,441	39	102	2.8	18	3,611	1.8
6/11/2024	19,100	2,370	11	31	1.9	6	1,029	0.5
9/16/2024	21,420	2,320	85	184	10.2	86	1,228	0.6
11/18/2024	22,935	1,515	55	120	6.1	53	1,097	0.5
2/8/2025	24,898	1,963	12	36	1.6	7	1,260	0.6
5/19/2025	27,723	2,825	15	40	2.6	8	2,008	1.0
8/7/2025	29,211	1,488	9	29	1.6	6	1,421	0.7
11/17/2025	31,649	2,438	19	60	2.7	13	2,189	1.1
<b>Total Mass Recovery to Date</b>			963	2,122	67	853	81,851	41



**TABLE 4**  
**SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS - SKID 2**  
OH Randel #5  
Hilcorp Energy Company  
San Juan County, New Mexico

**Notes:**

(1): rotameter float frozen in place, flow rate based on 11/16/2022 site visit flow rate and similar applied vacuum recorded during 11/16/2022 and 12/7/2022 site visits

(2): flow rate estimated based on previous data following reconfiguration

cf: cubic feet

cfm: 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

gray: indicates result less than the stated laboratory reporting limit (RL); RL used for calculating emissions.



# APPENDIX A

## Field Notes

---

### OH RANDEL #5 SVE SYSTEM BIWEEKLY 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

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	60080.66	1151	28683.8	
Inlet Vacuum (IWC)	63		58	
Inlet Flow from Rotometer (SCFM)	50		50	
Exhaust Vacuum (IWC)	-64		-80	
Inlet PID	894.1		384.4	
Exhaust PID	1113		292.4	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
 Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)  
 OPERATING WELLS: \_\_\_\_\_

## ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
<del>SVE-5</del>				
<del>SVE-8</del>				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
<del>SVE-7</del>				
<del>SVE-10</del>				
SVE-11				
<del>SVE-12</del>				
SVE-13	50.1	1689		
SVE-14	50.5	1321		
SVE-15	49.8	1177		
SVE-16	49.7	827.3		
SVE-17	49.4	783.3		
SVE-18	49.3	376.8		
SVE-19	50.7	2018		
SVE-20	50.1	296.7		
SVE-21	50.0	260.2		
SVE-22	46.4	652.6		

COMMENTS/OTHER MAINTENANCE: \_\_\_\_\_

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 7-30  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: \_\_\_\_\_ KO TANK HIGH LEVEL \_\_\_\_\_

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	60418.77	1409	29022.1	
Inlet Vacuum (IWC)	64		58	
Inlet Flow from Rotometer (SCFM)	56		50	
Exhaust Vacuum (IWC)	-63		-79	
Inlet PID	751.7		385.8	
Exhaust PID	1071		316.7	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: _____	SAMPLE TIME: _____
Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)	
OPERATING WELLS _____	

## ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
<del>SVE-8</del>				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
<del>SVE-7</del>				
<del>SVE-10</del>				
SVE-11				
<del>SVE-12</del>				
SVE-13	50.2	1737		
SVE-14	50.9	1668		
SVE-15	50.1	1581		
SVE-16	50.1	636.7		
SVE-17	49.7	713.1		
SVE-18	48.2	342.6		
SVE-19	50.3	422.9		
SVE-20	51.7	1210		
SVE-21	50.1	598.5		
SVE-22	46.5	665.4		

COMMENTS/OTHER MAINTENANCE: \_\_\_\_\_

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 8-7  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	60607.76	1111	29211.1	1111
Inlet Vacuum (IWC)	61		57	
Inlet Flow from Rotometer (SCFM)	58		50	
Exhaust Vacuum (IWC)	-62		-79	
Inlet PID	782.4		473.3	
Exhaust PID	1069		605.9	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: skid 1, skid 2      SAMPLE TIME: 1105, 1110  
Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)

OPERATING WELLS

## ZONES

Change in Well Operation:

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
<del>SVE-5</del>				
<del>SVE-8</del>				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
<del>SVE-7</del>				
<del>SVE-10</del>				
SVE-11				
<del>SVE-12</del>				
SVE-13	49.8	1635		
SVE-14	50.1	1510		
SVE-15	49.9	1278		
SVE-16	50.1	581.7		
SVE-17	49.4	1304		
SVE-18	46.1	605.0		
SVE-19	49.4	2178		
SVE-20	49.5	1442		
SVE-21	49.6	377.8		
SVE-22	46.4	192.6		

COMMENTS/OTHER MAINTENANCE:

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 8-25  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	61020.36	1315	29640	
Inlet Vacuum (IWC)	63		59	
Inlet Flow from Rotometer (SCFM)	58		50	
Exhaust Vacuum (IWC)	-62		-79	
Inlet PID	785.8		430.9	
Exhaust PID	1056		417.7	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)

OPERATING WELLS

## ZONES

Change in Well Operation:

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
<del>SVE-5</del>				
<del>SVE-8</del>				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
<del>SVE-7</del>				
<del>SVE-10</del>				
SVE-11				
<del>SVE-12</del>				
SVE-13	49.6	1448		
SVE-14	49.6	1450		
SVE-15	49.6	1116		
SVE-16	49.0	499.6		
SVE-17	49.6	810.2		
SVE-18	45.5	160.1		
SVE-19	48.8	2111		
SVE-20	49.4	1065		
SVE-21	49.7	233.5		
SVE-22	46.8	423.2		

COMMENTS/OTHER MAINTENANCE:

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 9-2  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS:		KO TANK HIGH LEVEL		
SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	61210.45	1121	29830.1	1121
Inlet Vacuum (IWC)	64		59	
Inlet Flow from Rotometer (SCFM)	58		50	
Exhaust Vacuum (IWC)	-63		-80	
Inlet PID	813.4		552.4	
Exhaust PID	783.7		509.1	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
 Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)  
 OPERATING WELLS: \_\_\_\_\_

### ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	50.3	136.7		
SVE-14	50.2	138.8		
SVE-15	50.2	106.8		
SVE-16	50.4	523.8		
SVE-17	51.1	157.1		
SVE-18	50.5	268.3		
SVE-19	52.7	206.3		
SVE-20	52.3	140.8		
SVE-21	50.2	819.3		
SVE-22	49.2	442.7		

COMMENTS/OTHER MAINTENANCE:

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 9-22  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: \_\_\_\_\_ KO TANK HIGH LEVEL

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	61692.43	1329	30312.1	1329
Inlet Vacuum (IWC)	64		59	
Inlet Flow from Rotometer (SCFM)	58		49	
Exhaust Vacuum (IWC)	-6.5		-8.1	
Inlet PID	898.7		653.0	
Exhaust PID	768.3		623.9	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
 Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)  
 OPERATING WELLS: \_\_\_\_\_

## ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	51.3	1646		
SVE-14	52.8	1441		
SVE-15	51.2	934.8		
SVE-16	51.5	553.8		
SVE-17	51.4	123.7		
SVE-18	51.1	253.8		
SVE-19	53.9	1917		
SVE-20	52.7	1373		
SVE-21	51.3	1131		
SVE-22	48.8	572.4		

COMMENTS/OTHER MAINTENANCE: \_\_\_\_\_

Empty box for handwritten comments or other maintenance notes.

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 10-2  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: \_\_\_\_\_ KO TANK HIGH LEVEL \_\_\_\_\_

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	61431.18	1211	30550.9	
Inlet Vacuum (IWC)	63		58	
Inlet Flow from Rotometer (SCFM)	58		49	
Exhaust Vacuum (IWC)	-63		-80	
Inlet PID	798		518.7	
Exhaust PID	1014		284.2	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_

Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)

OPERATING WELLS \_\_\_\_\_

### ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	50.6	1854		
SVE-14	50.5	1359		
SVE-15	50.5	1596		
SVE-16	50.0	486.6		
SVE-17	50.5	216.4		
SVE-18	47.8	268.8		
SVE-19	50.4	2072		
SVE-20	50.7	1284		
SVE-21	50.6	339.1		
SVE-22	48.3	498.3		

COMMENTS/OTHER MAINTENANCE: \_\_\_\_\_

Empty box for comments or other maintenance notes.

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 10-22  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: \_\_\_\_\_ KO TANK HIGH LEVEL

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	62398.49	1409	31025.4	1410
Inlet Vacuum (IWC)	64		59	
Inlet Flow from Rotometer (SCFM)	57		49	
Exhaust Vacuum (IWC)	-63		-80	
Inlet PID	771.5		522.8	
Exhaust PID	843.1		313.5	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)

OPERATING WELLS

## ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	51.1	1732		
SVE-14	50.9	1392		
SVE-15	50.8	1230		
SVE-16	50.4	522.3		
SVE-17	50.6	158.6		
SVE-18	49.8	313.7		
SVE-19	52.4	1944		
SVE-20	51.2	1217		
SVE-21	50.8	841.3		
SVE-22	48.6	512.5		

COMMENTS/OTHER MAINTENANCE:

\_\_\_\_\_

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 11-17  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: \_\_\_\_\_ KO TANK HIGH LEVEL

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	62017.62	1308	21679.3	
Inlet Vacuum (IWC)	64		59	
Inlet Flow from Rotometer (SCFM)	60		48	
Exhaust Vacuum (IWC)	-64		-80	
Inlet PID	937.1		522.5	
Exhaust PID	1388		392.1	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: skid 1, 2 SAMPLE TIME: 1300, 1315  
Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)

OPERATING WELLS

## ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	50.6	1847		
SVE-14	50.2	1562		
SVE-15	50.1	1726		
SVE-16	50.2	471.3		
SVE-17	48.2	367.4		
SVE-18	47.0	330.7		
SVE-19	50.9	2038		
SVE-20	51.4	1132		
SVE-21	50.4	461.7		
SVE-22	47.2	1160		

COMMENTS/OTHER MAINTENANCE:

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 11-29  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS: \_\_\_\_\_ KO TANK HIGH LEVEL \_\_\_\_\_

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	63300.15	1221	31936.6	
Inlet Vacuum (IWC)	72		59	
Inlet Flow from Rotometer (SCFM)	58		48	
Exhaust Vacuum (IWC)	-64		-81	
Inlet PID	613.1		513.7	
Exhaust PID	802.9		411.8	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
 Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)  
 OPERATING WELLS: \_\_\_\_\_

### ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	50.3	1548		
SVE-14	49.2	1310		
SVE-15	48.7	1040		
SVE-16	48.8	501.3		
SVE-17	46.6	378.1		
SVE-18	49.2	932.1		
SVE-19	52.2	1977		
SVE-20	51.7	1051		
SVE-21	50.4	543.8		
SVE-22	46.6	239.8		

COMMENTS/OTHER MAINTENANCE:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 12-9  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS:  KO TANK HIGH LEVEL

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	63535.16	1408	32178.3	
Inlet Vacuum (IWC)	83		59	
Inlet Flow from Rotometer (SCFM)	57		48	
Exhaust Vacuum (IWC)	-65		-80	
Inlet PID	1034		480.6	
Exhaust PID	1274		468.6	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)

OPERATING WELLS

## ZONES

Change in Well Operation:

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	50.5		1381	
SVE-14	50.2		1272	
SVE-15	49.6		783.9	
SVE-16	48.7		512.6	
SVE-17	47.8		381.2	
SVE-18	51.1		704.3	
SVE-19	53.3		2590	
SVE-20	53.9		739.2	
SVE-21	49.9		264.6	
SVE-22	45.7		466.9	

COMMENTS/OTHER MAINTENANCE:

### OH RANDEL #5 SVE SYSTEM BIWEEKLY O&M FORM

DATE: 12-29  
TIME ONSITE: \_\_\_\_\_

O&M PERSONNEL: B Sinclair  
TIME OFFSITE: \_\_\_\_\_

#### SVE SYSTEM - MONTHLY O&M

SVE ALARMS:  KO TANK HIGH LEVEL

SVE SYSTEM	SKID 1 READING	TIME	SKID 2 READING	TIME
Blower Hours (take photo)	64006.56	1127	32651.2	
Inlet Vacuum (IWC)	8.5		59	
Inlet Flow from Rotometer (SCFM)	90		48	
Exhaust Vacuum (IWC)	-66		-81	
Inlet PID	953.7		548.1	
Exhaust PID	1255		539.4	
K/O Tank Liquid Level				
K/O Liquid Drained (gallons)				

#### SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_  
 Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)  
 OPERATING WELLS: \_\_\_\_\_

### ZONES

Change in Well Operation: \_\_\_\_\_

#### Zone A - Secondary Impacts

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-5				
SVE-8				

#### Zone B - Tertiary Impacts

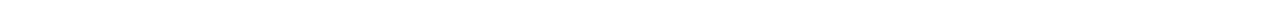
LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	FLOW (CFM)	ADJUSTMENTS
SVE-6				
SVE-7				
SVE-10				
SVE-11				
SVE-12				
SVE-13	50.7	1481.5		
SVE-14	50.5	1107		
SVE-15	50.3	882.5		
SVE-16	49.2	665.1		
SVE-17	46.7	431.4		
SVE-18	51.5	910.2		
SVE-19	53.8	204.5		
SVE-20	54.1	810.2		
SVE-21	51.2	372.6		
SVE-22	46.5	359.3		

COMMENTS/OTHER MAINTENANCE:





## APPENDIX B



# Project Photographs



**PROJECT PHOTOGRAPHS**  
OH Randel #5  
San Juan County, New Mexico  
Hilcorp Energy Company

<p><b>Photograph 1</b></p> <p>Runtime meter taken on June 24, 2025 from SVE Skid 1 (original SVE system) at 11:17 AM Hours = 59,567.83</p>	
<p><b>Photograph 2</b></p> <p>Runtime meter taken on June 24, 2025 from SVE Skid 2 (new SVE system) at 11:17 AM Hours = 28,155.2</p>	

**PROJECT PHOTOGRAPHS**  
OH Randel #5  
San Juan County, New Mexico  
Hilcorp Energy Company

<p><b>Photograph 3</b></p> <p>Runtime meter taken on December 29, 2025 from SVE Skid 1 (original SVE system) at 11:27 AM Hours = 64,006.56</p>	
<p><b>Photograph 4</b></p> <p>Runtime meter taken on December 29, 2025 from SVE Skid 2 (new SVE system) at 11:28 AM Hours = 32,651.2</p>	



## APPENDIX C

# Laboratory Analytical Reports

---



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kate Kaufman  
Hilcorp Energy  
PO BOX 4700  
Farmington, New Mexico 87499

Generated 8/29/2025 3:58:05 PM

## JOB DESCRIPTION

OH Randel 5

## JOB NUMBER

885-30532-1

Eurofins Albuquerque  
4901 Hawkins NE  
Albuquerque NM 87109



# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
8/29/2025 3:58:05 PM

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

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

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Laboratory Job ID: 885-30532-1

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

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	10
QC Association Summary . . . . .	13
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Subcontract Data . . . . .	18
Chain of Custody . . . . .	32
Receipt Checklists . . . . .	33

## Definitions/Glossary

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

## Glossary

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

# Case Narrative

Client: Hilcorp Energy  
Project: OH Randel 5

Job ID: 885-30532-1

**Job ID: 885-30532-1**

**Eurofins Albuquerque**

## Job Narrative 885-30532-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 8/8/2025 7:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

### Receipt Exceptions

One or more containers for the following sample(s) was received empty: One of the airbags sent was damaged and empty. Will have in house analysis done first and then send remaining volume to sub lab for "Fixed Gas" analysis. Skid 1 (885-30532-1).

### 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 885-31970 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane. 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

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: OH Randel 5

Job ID: 885-30532-1

Client Sample ID: Skid 1

Lab Sample ID: 885-30532-1

Date Collected: 08/07/25 11:05

Matrix: Air

Date Received: 08/08/25 07:10

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		5.0	ug/L			08/11/25 13:59	50
1,1,1-Trichloroethane	ND		5.0	ug/L			08/11/25 13:59	50
1,1,2,2-Tetrachloroethane	ND		10	ug/L			08/11/25 13:59	50
1,1,2-Trichloroethane	ND		5.0	ug/L			08/11/25 13:59	50
1,1-Dichloroethane	ND		5.0	ug/L			08/11/25 13:59	50
1,1-Dichloroethene	ND		5.0	ug/L			08/11/25 13:59	50
1,1-Dichloropropene	ND		5.0	ug/L			08/11/25 13:59	50
1,2,3-Trichlorobenzene	ND		5.0	ug/L			08/11/25 13:59	50
1,2,3-Trichloropropane	ND		10	ug/L			08/11/25 13:59	50
1,2,4-Trichlorobenzene	ND		5.0	ug/L			08/11/25 13:59	50
1,2,4-Trimethylbenzene	ND		5.0	ug/L			08/11/25 13:59	50
1,2-Dibromo-3-Chloropropane	ND		10	ug/L			08/11/25 13:59	50
1,2-Dibromoethane (EDB)	ND		5.0	ug/L			08/11/25 13:59	50
1,2-Dichlorobenzene	ND		5.0	ug/L			08/11/25 13:59	50
1,2-Dichloroethane (EDC)	ND		5.0	ug/L			08/11/25 13:59	50
1,2-Dichloropropane	ND		5.0	ug/L			08/11/25 13:59	50
1,3,5-Trimethylbenzene	ND		5.0	ug/L			08/11/25 13:59	50
1,3-Dichlorobenzene	ND		5.0	ug/L			08/11/25 13:59	50
1,3-Dichloropropane	ND		5.0	ug/L			08/11/25 13:59	50
1,4-Dichlorobenzene	ND		5.0	ug/L			08/11/25 13:59	50
1-Methylnaphthalene	ND		20	ug/L			08/11/25 13:59	50
2,2-Dichloropropane	ND		10	ug/L			08/11/25 13:59	50
2-Butanone	ND		50	ug/L			08/11/25 13:59	50
2-Chlorotoluene	ND		5.0	ug/L			08/11/25 13:59	50
2-Hexanone	ND		50	ug/L			08/11/25 13:59	50
2-Methylnaphthalene	ND		20	ug/L			08/11/25 13:59	50
4-Chlorotoluene	ND		5.0	ug/L			08/11/25 13:59	50
4-Isopropyltoluene	ND		5.0	ug/L			08/11/25 13:59	50
4-Methyl-2-pentanone	ND		50	ug/L			08/11/25 13:59	50
Acetone	ND		50	ug/L			08/11/25 13:59	50
<b>Benzene</b>	<b>60</b>		5.0	ug/L			08/11/25 13:59	50
Bromobenzene	ND		5.0	ug/L			08/11/25 13:59	50
Bromodichloromethane	ND		5.0	ug/L			08/11/25 13:59	50
Dibromochloromethane	ND		5.0	ug/L			08/11/25 13:59	50
Bromoform	ND		5.0	ug/L			08/11/25 13:59	50
Bromomethane	ND		15	ug/L			08/11/25 13:59	50
Carbon disulfide	ND		50	ug/L			08/11/25 13:59	50
Carbon tetrachloride	ND		5.0	ug/L			08/11/25 13:59	50
Chlorobenzene	ND		5.0	ug/L			08/11/25 13:59	50
Chloroethane	ND		10	ug/L			08/11/25 13:59	50
Chloroform	ND		5.0	ug/L			08/11/25 13:59	50
Chloromethane	ND		15	ug/L			08/11/25 13:59	50
cis-1,2-Dichloroethene	ND		5.0	ug/L			08/11/25 13:59	50
cis-1,3-Dichloropropene	ND		5.0	ug/L			08/11/25 13:59	50
Dibromomethane	ND		5.0	ug/L			08/11/25 13:59	50
Dichlorodifluoromethane	ND		5.0	ug/L			08/11/25 13:59	50
Ethylbenzene	ND		5.0	ug/L			08/11/25 13:59	50
Hexachlorobutadiene	ND		5.0	ug/L			08/11/25 13:59	50

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

Client Sample ID: Skid 1

Lab Sample ID: 885-30532-1

Date Collected: 08/07/25 11:05

Matrix: Air

Date Received: 08/08/25 07:10

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	ND		5.0	ug/L			08/11/25 13:59	50
Methyl-tert-butyl Ether (MTBE)	ND		5.0	ug/L			08/11/25 13:59	50
Methylene Chloride	ND		15	ug/L			08/11/25 13:59	50
n-Butylbenzene	ND		15	ug/L			08/11/25 13:59	50
N-Propylbenzene	ND		5.0	ug/L			08/11/25 13:59	50
Naphthalene	ND		10	ug/L			08/11/25 13:59	50
sec-Butylbenzene	ND		5.0	ug/L			08/11/25 13:59	50
Styrene	ND		5.0	ug/L			08/11/25 13:59	50
tert-Butylbenzene	ND		5.0	ug/L			08/11/25 13:59	50
Tetrachloroethene (PCE)	ND		5.0	ug/L			08/11/25 13:59	50
<b>Toluene</b>	<b>170</b>		5.0	ug/L			08/11/25 13:59	50
trans-1,2-Dichloroethene	ND		5.0	ug/L			08/11/25 13:59	50
trans-1,3-Dichloropropene	ND		5.0	ug/L			08/11/25 13:59	50
Trichloroethene (TCE)	ND		5.0	ug/L			08/11/25 13:59	50
Trichlorofluoromethane	ND		5.0	ug/L			08/11/25 13:59	50
Vinyl chloride	ND		5.0	ug/L			08/11/25 13:59	50
<b>Xylenes, Total</b>	<b>37</b>		7.5	ug/L			08/11/25 13:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		08/11/25 13:59	50
Toluene-d8 (Surr)	108		70 - 130		08/11/25 13:59	50
4-Bromofluorobenzene (Surr)	85		70 - 130		08/11/25 13:59	50
Dibromofluoromethane (Surr)	104		70 - 130		08/11/25 13:59	50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics [C6 - C10]</b>	<b>7900</b>		250	ug/L			08/15/25 14:20	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150		08/15/25 14:20	50

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

Client Sample ID: Skid 2

Lab Sample ID: 885-30532-2

Date Collected: 08/07/25 11:10

Matrix: Air

Date Received: 08/08/25 07:10

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		5.0	ug/L			08/11/25 14:27	50
1,1,1-Trichloroethane	ND		5.0	ug/L			08/11/25 14:27	50
1,1,1,2,2-Tetrachloroethane	ND		10	ug/L			08/11/25 14:27	50
1,1,2-Trichloroethane	ND		5.0	ug/L			08/11/25 14:27	50
1,1-Dichloroethane	ND		5.0	ug/L			08/11/25 14:27	50
1,1-Dichloroethene	ND		5.0	ug/L			08/11/25 14:27	50
1,1-Dichloropropene	ND		5.0	ug/L			08/11/25 14:27	50
1,2,3-Trichlorobenzene	ND		5.0	ug/L			08/11/25 14:27	50
1,2,3-Trichloropropane	ND		10	ug/L			08/11/25 14:27	50
1,2,4-Trichlorobenzene	ND		5.0	ug/L			08/11/25 14:27	50
1,2,4-Trimethylbenzene	ND		5.0	ug/L			08/11/25 14:27	50
1,2-Dibromo-3-Chloropropane	ND		10	ug/L			08/11/25 14:27	50
1,2-Dibromoethane (EDB)	ND		5.0	ug/L			08/11/25 14:27	50
1,2-Dichlorobenzene	ND		5.0	ug/L			08/11/25 14:27	50
1,2-Dichloroethane (EDC)	ND		5.0	ug/L			08/11/25 14:27	50
1,2-Dichloropropane	ND		5.0	ug/L			08/11/25 14:27	50
1,3,5-Trimethylbenzene	ND		5.0	ug/L			08/11/25 14:27	50
1,3-Dichlorobenzene	ND		5.0	ug/L			08/11/25 14:27	50
1,3-Dichloropropane	ND		5.0	ug/L			08/11/25 14:27	50
1,4-Dichlorobenzene	ND		5.0	ug/L			08/11/25 14:27	50
1-Methylnaphthalene	ND		20	ug/L			08/11/25 14:27	50
2,2-Dichloropropane	ND		10	ug/L			08/11/25 14:27	50
2-Butanone	ND		50	ug/L			08/11/25 14:27	50
2-Chlorotoluene	ND		5.0	ug/L			08/11/25 14:27	50
2-Hexanone	ND		50	ug/L			08/11/25 14:27	50
2-Methylnaphthalene	ND		20	ug/L			08/11/25 14:27	50
4-Chlorotoluene	ND		5.0	ug/L			08/11/25 14:27	50
4-Isopropyltoluene	ND		5.0	ug/L			08/11/25 14:27	50
4-Methyl-2-pentanone	ND		50	ug/L			08/11/25 14:27	50
Acetone	ND		50	ug/L			08/11/25 14:27	50
<b>Benzene</b>	<b>32</b>		5.0	ug/L			08/11/25 14:27	50
Bromobenzene	ND		5.0	ug/L			08/11/25 14:27	50
Bromodichloromethane	ND		5.0	ug/L			08/11/25 14:27	50
Dibromochloromethane	ND		5.0	ug/L			08/11/25 14:27	50
Bromoform	ND		5.0	ug/L			08/11/25 14:27	50
Bromomethane	ND		15	ug/L			08/11/25 14:27	50
Carbon disulfide	ND		50	ug/L			08/11/25 14:27	50
Carbon tetrachloride	ND		5.0	ug/L			08/11/25 14:27	50
Chlorobenzene	ND		5.0	ug/L			08/11/25 14:27	50
Chloroethane	ND		10	ug/L			08/11/25 14:27	50
Chloroform	ND		5.0	ug/L			08/11/25 14:27	50
Chloromethane	ND		15	ug/L			08/11/25 14:27	50
cis-1,2-Dichloroethene	ND		5.0	ug/L			08/11/25 14:27	50
cis-1,3-Dichloropropene	ND		5.0	ug/L			08/11/25 14:27	50
Dibromomethane	ND		5.0	ug/L			08/11/25 14:27	50
Dichlorodifluoromethane	ND		5.0	ug/L			08/11/25 14:27	50
Ethylbenzene	ND		5.0	ug/L			08/11/25 14:27	50
Hexachlorobutadiene	ND		5.0	ug/L			08/11/25 14:27	50

Eurofins Albuquerque

## Client Sample Results

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

Client Sample ID: Skid 2

Lab Sample ID: 885-30532-2

Date Collected: 08/07/25 11:10

Matrix: Air

Date Received: 08/08/25 07:10

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	ND		5.0	ug/L			08/11/25 14:27	50
Methyl-tert-butyl Ether (MTBE)	ND		5.0	ug/L			08/11/25 14:27	50
Methylene Chloride	ND		15	ug/L			08/11/25 14:27	50
n-Butylbenzene	ND		15	ug/L			08/11/25 14:27	50
N-Propylbenzene	ND		5.0	ug/L			08/11/25 14:27	50
Naphthalene	ND		10	ug/L			08/11/25 14:27	50
sec-Butylbenzene	ND		5.0	ug/L			08/11/25 14:27	50
Styrene	ND		5.0	ug/L			08/11/25 14:27	50
tert-Butylbenzene	ND		5.0	ug/L			08/11/25 14:27	50
Tetrachloroethene (PCE)	ND		5.0	ug/L			08/11/25 14:27	50
<b>Toluene</b>	<b>110</b>		5.0	ug/L			08/11/25 14:27	50
trans-1,2-Dichloroethene	ND		5.0	ug/L			08/11/25 14:27	50
trans-1,3-Dichloropropene	ND		5.0	ug/L			08/11/25 14:27	50
Trichloroethene (TCE)	ND		5.0	ug/L			08/11/25 14:27	50
Trichlorofluoromethane	ND		5.0	ug/L			08/11/25 14:27	50
Vinyl chloride	ND		5.0	ug/L			08/11/25 14:27	50
<b>Xylenes, Total</b>	<b>23</b>		7.5	ug/L			08/11/25 14:27	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		08/11/25 14:27	50
Toluene-d8 (Surr)	108		70 - 130		08/11/25 14:27	50
4-Bromofluorobenzene (Surr)	88		70 - 130		08/11/25 14:27	50
Dibromofluoromethane (Surr)	104		70 - 130		08/11/25 14:27	50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics [C6 - C10]</b>	<b>4100</b>		250	ug/L			08/15/25 14:44	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 150		08/15/25 14:44	50

Eurofins Albuquerque

## QC Sample Results

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

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

Lab Sample ID: MB 885-31970/5

Matrix: Air

Analysis Batch: 31970

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			08/11/25 13:32	1
1,1,1-Trichloroethane	ND		0.10	ug/L			08/11/25 13:32	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			08/11/25 13:32	1
1,1,2-Trichloroethane	ND		0.10	ug/L			08/11/25 13:32	1
1,1-Dichloroethane	ND		0.10	ug/L			08/11/25 13:32	1
1,1-Dichloroethene	ND		0.10	ug/L			08/11/25 13:32	1
1,1-Dichloropropene	ND		0.10	ug/L			08/11/25 13:32	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			08/11/25 13:32	1
1,2,3-Trichloropropane	ND		0.20	ug/L			08/11/25 13:32	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			08/11/25 13:32	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			08/11/25 13:32	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			08/11/25 13:32	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			08/11/25 13:32	1
1,2-Dichlorobenzene	ND		0.10	ug/L			08/11/25 13:32	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			08/11/25 13:32	1
1,2-Dichloropropane	ND		0.10	ug/L			08/11/25 13:32	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			08/11/25 13:32	1
1,3-Dichlorobenzene	ND		0.10	ug/L			08/11/25 13:32	1
1,3-Dichloropropane	ND		0.10	ug/L			08/11/25 13:32	1
1,4-Dichlorobenzene	ND		0.10	ug/L			08/11/25 13:32	1
1-Methylnaphthalene	ND		0.40	ug/L			08/11/25 13:32	1
2,2-Dichloropropane	ND		0.20	ug/L			08/11/25 13:32	1
2-Butanone	ND		1.0	ug/L			08/11/25 13:32	1
2-Chlorotoluene	ND		0.10	ug/L			08/11/25 13:32	1
2-Hexanone	ND		1.0	ug/L			08/11/25 13:32	1
2-Methylnaphthalene	ND		0.40	ug/L			08/11/25 13:32	1
4-Chlorotoluene	ND		0.10	ug/L			08/11/25 13:32	1
4-Isopropyltoluene	ND		0.10	ug/L			08/11/25 13:32	1
4-Methyl-2-pentanone	ND		1.0	ug/L			08/11/25 13:32	1
Acetone	ND		1.0	ug/L			08/11/25 13:32	1
Benzene	ND		0.10	ug/L			08/11/25 13:32	1
Bromobenzene	ND		0.10	ug/L			08/11/25 13:32	1
Bromodichloromethane	ND		0.10	ug/L			08/11/25 13:32	1
Dibromochloromethane	ND		0.10	ug/L			08/11/25 13:32	1
Bromoform	ND		0.10	ug/L			08/11/25 13:32	1
Bromomethane	ND		0.30	ug/L			08/11/25 13:32	1
Carbon disulfide	ND		1.0	ug/L			08/11/25 13:32	1
Carbon tetrachloride	ND		0.10	ug/L			08/11/25 13:32	1
Chlorobenzene	ND		0.10	ug/L			08/11/25 13:32	1
Chloroethane	ND		0.20	ug/L			08/11/25 13:32	1
Chloroform	ND		0.10	ug/L			08/11/25 13:32	1
Chloromethane	ND		0.30	ug/L			08/11/25 13:32	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			08/11/25 13:32	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			08/11/25 13:32	1
Dibromomethane	ND		0.10	ug/L			08/11/25 13:32	1
Dichlorodifluoromethane	ND		0.10	ug/L			08/11/25 13:32	1
Ethylbenzene	ND		0.10	ug/L			08/11/25 13:32	1
Hexachlorobutadiene	ND		0.10	ug/L			08/11/25 13:32	1

Eurofins Albuquerque

### QC Sample Results

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

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

Lab Sample ID: MB 885-31970/5  
Matrix: Air  
Analysis Batch: 31970

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			08/11/25 13:32	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			08/11/25 13:32	1
Methylene Chloride	ND		0.30	ug/L			08/11/25 13:32	1
n-Butylbenzene	ND		0.30	ug/L			08/11/25 13:32	1
N-Propylbenzene	ND		0.10	ug/L			08/11/25 13:32	1
Naphthalene	ND		0.20	ug/L			08/11/25 13:32	1
sec-Butylbenzene	ND		0.10	ug/L			08/11/25 13:32	1
Styrene	ND		0.10	ug/L			08/11/25 13:32	1
tert-Butylbenzene	ND		0.10	ug/L			08/11/25 13:32	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			08/11/25 13:32	1
Toluene	ND		0.10	ug/L			08/11/25 13:32	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			08/11/25 13:32	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			08/11/25 13:32	1
Trichloroethene (TCE)	ND		0.10	ug/L			08/11/25 13:32	1
Trichlorofluoromethane	ND		0.10	ug/L			08/11/25 13:32	1
Vinyl chloride	ND		0.10	ug/L			08/11/25 13:32	1
Xylenes, Total	ND		0.15	ug/L			08/11/25 13:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		08/11/25 13:32	1
Toluene-d8 (Surr)	107		70 - 130		08/11/25 13:32	1
4-Bromofluorobenzene (Surr)	86		70 - 130		08/11/25 13:32	1
Dibromofluoromethane (Surr)	101		70 - 130		08/11/25 13:32	1

Lab Sample ID: LCS 885-31970/4  
Matrix: Air  
Analysis Batch: 31970

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	18.7		ug/L		93	70 - 130
Benzene	20.0	19.5		ug/L		98	70 - 130
Chlorobenzene	20.0	23.0		ug/L		115	70 - 130
Toluene	20.0	22.4		ug/L		112	70 - 130
Trichloroethene (TCE)	20.0	19.3		ug/L		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
Toluene-d8 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	85		70 - 130
Dibromofluoromethane (Surr)	105		70 - 130

Eurofins Albuquerque

### QC Sample Results

Client: Hilcorp Energy  
 Project/Site: OH Randel 5

Job ID: 885-30532-1

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

**Lab Sample ID: MB 885-32441/6**  
**Matrix: Air**  
**Analysis Batch: 32441**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	ug/L			08/15/25 13:32	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150				08/15/25 13:32	1

**Lab Sample ID: LCS 885-32441/4**  
**Matrix: Air**  
**Analysis Batch: 32441**

**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	44.7		ug/L		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	186		15 - 150				

**Lab Sample ID: 885-30532-1 DU**  
**Matrix: Air**  
**Analysis Batch: 32441**

**Client Sample ID: Skid 1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	7900		7760		ug/L		1	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
4-Bromofluorobenzene (Surr)	105		15 - 150					

Eurofins Albuquerque

# QC Association Summary

Client: Hilcorp Energy  
 Project/Site: OH Randel 5

Job ID: 885-30532-1

## GC/MS VOA

### Analysis Batch: 31970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30532-1	Skid 1	Total/NA	Air	8260B	
885-30532-2	Skid 2	Total/NA	Air	8260B	
MB 885-31970/5	Method Blank	Total/NA	Air	8260B	
LCS 885-31970/4	Lab Control Sample	Total/NA	Air	8260B	

## GC VOA

### Analysis Batch: 32441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30532-1	Skid 1	Total/NA	Air	8015D	
885-30532-2	Skid 2	Total/NA	Air	8015D	
MB 885-32441/6	Method Blank	Total/NA	Air	8015D	
LCS 885-32441/4	Lab Control Sample	Total/NA	Air	8015D	
885-30532-1 DU	Skid 1	Total/NA	Air	8015D	

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

# Lab Chronicle

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

**Client Sample ID: Skid 1**  
**Date Collected: 08/07/25 11:05**  
**Date Received: 08/08/25 07:10**

**Lab Sample ID: 885-30532-1**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		50	31970	CM	EET ALB	08/11/25 13:59
Total/NA	Analysis	8015D		50	32441	JP	EET ALB	08/15/25 14:20

**Client Sample ID: Skid 2**  
**Date Collected: 08/07/25 11:10**  
**Date Received: 08/08/25 07:10**

**Lab Sample ID: 885-30532-2**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		50	31970	CM	EET ALB	08/11/25 14:27
Total/NA	Analysis	8015D		50	32441	JP	EET ALB	08/15/25 14:44

**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

# Accreditation/Certification Summary

Client: Hilcorp Energy  
 Project/Site: OH Randel 5

Job ID: 885-30532-1

## 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: OH Randel 5

Job ID: 885-30532-1

## 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	02-26-26
--------	-------	----------	----------

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

Eurofins Albuquerque

## Accreditation/Certification Summary

Client: Hilcorp Energy  
Project/Site: OH Randel 5

Job ID: 885-30532-1

## 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



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

# ANALYTICAL SUMMARY REPORT

August 18, 2025

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

Work Order: B25081198      Quote ID: B15626

Project Name: 88501698, OH Randel 5

Energy Laboratories Inc Billings MT received the following 1 sample for Eurofins TestAmerica - Albuquerque on 8/13/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25081198-001	Skid 2 (885-30532-2)	08/07/25 11:10	08/13/25	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.

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



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 ANALYTICAL REPORT**

Prepared by Billings, MT Branch

**Client:** Eurofins TestAmerica - Albuquerque  
**Project:** 88501698, OH Randel 5  
**Lab ID:** B25081198-001  
**Client Sample ID:** Skid 2 (885-30532-2)

**Report Date:** 08/18/25  
**Collection Date:** 08/07/25 11:10  
**Date Received:** 08/13/25  
**Matrix:** Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>GAS CHROMATOGRAPHY ANALYSIS REPORT</b>							
Oxygen	21.28	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Nitrogen	78.54	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Carbon Dioxide	0.11	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Hexanes plus	0.07	Mol %		0.01		GPA 2261-13	08/14/25 12:27 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj
Hexanes plus	0.029	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj
GPM Total	0.029	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj
GPM Pentanes plus	0.029	gpm		0.001		GPA 2261-13	08/14/25 12:27 / jrj

**CALCULATED PROPERTIES**

Gross BTU per cu ft @ Std Cond. (HHV)	3			1		GPA 2261-13	08/14/25 12:27 / jrj
Net BTU per cu ft @ std cond. (LHV)	3			1		GPA 2261-13	08/14/25 12:27 / jrj
Pseudo-critical Pressure, psia	544			1		GPA 2261-13	08/14/25 12:27 / jrj
Pseudo-critical Temperature, deg R	239			1		GPA 2261-13	08/14/25 12:27 / jrj
Specific Gravity @ 60/60F	0.999			0.001		D3588-17	08/14/25 12:27 / jrj
Air, %	97.24			0.01		GPA 2261-13	08/14/25 12:27 / 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)



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

# QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25081198

Report Date: 08/18/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: GPA 2261-13</b>								Batch: R447557		
<b>Lab ID: B25081200-001ADUP</b>	12 Sample Duplicate				Run: GC7890_250814A			08/14/25 11:34		
Oxygen		19.3	Mol %	0.01				0.8	20	
Nitrogen		79.0	Mol %	0.01				0.2	20	
Carbon Dioxide		1.66	Mol %	0.01				0.6	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		0.04	Mol %	0.01				0.0	20	
<b>Lab ID: LCS081425</b>	11 Laboratory Control Sample				Run: GC7890_250814A			08/14/25 14:06		
Oxygen		0.64	Mol %	0.01	130	70	130			
Nitrogen		6.19	Mol %	0.01	105	70	130			
Carbon Dioxide		0.97	Mol %	0.01	97	70	130			
Methane		76.5	Mol %	0.01	100	70	130			
Ethane		6.05	Mol %	0.01	100	70	130			
Propane		5.01	Mol %	0.01	100	70	130			
Isobutane		1.51	Mol %	0.01	76	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		0.47	Mol %	0.01	94	70	130			
n-Pentane		0.50	Mol %	0.01	100	70	130			
Hexanes plus		0.20	Mol %	0.01	97	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

Eurofins TestAmerica - Albuquerque

B25081198

Login completed by: Leslie S. Cadreau

Date Received: 8/13/2025

Reviewed by: darcy

Received by: SW

Reviewed Date: 8/13/2025

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 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:	18.0°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

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

### Laboratory Certifications and Accreditations

Current certificates are available at [www.energylab.com](http://www.energylab.com) website:

	Agency	Number
<b>Billings, MT</b>    	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	
<b>Casper, WY</b>  	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	
<b>Gillette, WY</b>	US EPA Region VIII	WY00006
<b>Helena, MT</b>	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090

**Eurofins Albuquerque**  
4901 Hawkins NE  
Albuquerque, NM 87109  
Phone: 505-345-3975 Fax: 505-345-4107

### Chain of Custody Record



Environment Testing

<b>Client Information (Sub Contract Lab)</b>		Sampler: N/A		Lab PM: Garcia, Michelle		Carrier Tracking No(s): N/A		COC No: 885-6082-1	
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: michelle.garcia@et.eurofins.com		State of Origin: New Mexico		Page: Page 1 of 1	
Company: Energy Laboratories, Inc.		Address: 1120 South 27th Street,		Accreditations Required (See note): NELAP - Oregon; State - New Mexico		Job #: 885-30532-1		Preservation Codes:	
City: Billings		State, Zip: MT, 59101		PO #: N/A		Due Date Requested: 8/15/2025		Analysis Requested	
Phone: 406-252-6325(Tel)		W/O #: N/A		Project #: 88501698		TAT Requested (days): N/A		Total Number of Containers	
Email: N/A		Site: N/A		SSOW#: N/A		Sample Date: 8/7/25		Field Filtered Sample (Yes or No)	
Project Name: OH Rendel 5		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		Sample Date: 8/7/25		Perform MS/MSD (Yes or No)	
Site: N/A		Sample Date: 8/7/25		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		SUB - Subcontract - Fixed Gases	
Matrix (V=water, S=solid, O=water/Oil, BT=Tissue, A=AU)		Sample Date: 8/7/25		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		Field Filtered Sample (Yes or No)	
Sample Identification - Client ID (Lab ID)		Sample Date: 8/7/25		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		Perform MS/MSD (Yes or No)	
Skid 2 (885-30532-2)		Sample Date: 8/7/25		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		SUB - Subcontract - Fixed Gases	
Special Instructions/Note:		Sample Date: 8/7/25		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		Field Filtered Sample (Yes or No)	
See Attached Instructions		Sample Date: 8/7/25		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		Perform MS/MSD (Yes or No)	
BZ 508 1198		Sample Date: 8/7/25		Sample Time: 11:10 Mountain		Sample Type (C=Comp, G=grab): G		SUB - Subcontract - Fixed Gases	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & 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/matrix 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  
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2  
 Return To Client  
 Disposal By Lab  
 Archive For \_\_\_\_\_ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: *John Delute* Date: 8/11/25 Time: 1415  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Custody Seals Intact:  Yes  No  
 Custody Seal No.: SKID 2  
 Cooler Temperature(s) °C and Other Remarks: 08/13/25 10:55

Ver: 10/10/2024

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

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

**ICOC No:**  
885-6082

**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
2	SUBCONTRACT	SUB - Subcontract - Fixed Gases	Fixed Gases



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

# ANALYTICAL SUMMARY REPORT

August 29, 2025

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

Work Order: B25081902      Quote ID: B15626

Project Name: OH Randel 5 88501698

Energy Laboratories Inc Billings MT received the following 1 sample for Eurofins TestAmerica - Albuquerque on 8/20/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25081902-001	Skid 1 (885-30532-1)	08/07/25 11:05	08/20/25	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.

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



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 ANALYTICAL REPORT**

Prepared by Billings, MT Branch

**Client:** Eurofins TestAmerica - Albuquerque  
**Project:** OH Randel 5 88501698  
**Lab ID:** B25081902-001  
**Client Sample ID:** Skid 1 (885-30532-1)

**Report Date:** 08/29/25  
**Collection Date:** 08/07/25 11:05  
**Date Received:** 08/20/25  
**Matrix:** Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>GAS CHROMATOGRAPHY ANALYSIS REPORT</b>							
Oxygen	21.81	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Nitrogen	77.82	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Carbon Dioxide	0.22	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Isopentane	0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
n-Pentane	0.01	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Hexanes plus	0.13	Mol %		0.01		GPA 2261-13	08/22/25 10:27 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj
Isopentane	0.004	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj
n-Pentane	0.004	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj
Hexanes plus	0.055	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj
GPM Total	0.062	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj
GPM Pentanes plus	0.062	gpm		0.001		GPA 2261-13	08/22/25 10:27 / jrj

**CALCULATED PROPERTIES**

Gross BTU per cu ft @ Std Cond. (HHV)	7			1		GPA 2261-13	08/22/25 10:27 / jrj
Net BTU per cu ft @ std cond. (LHV)	6			1		GPA 2261-13	08/22/25 10:27 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-13	08/22/25 10:27 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-13	08/22/25 10:27 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-17	08/22/25 10:27 / jrj
Air, %	99.64			0.01		GPA 2261-13	08/22/25 10:27 / jrj

- The analysis was not corrected for air.

**COMMENTS**

- 08/22/25 10:27 / jrj

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

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

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



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

### QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25081902

Report Date: 08/29/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: GPA 2261-13</b>								Batch: R447995		
<b>Lab ID: B25082122-001ADUP</b>	12 Sample Duplicate				Run: GC7890_250822A			08/22/25 12:07		
Oxygen		22.0	Mol %	0.01				3.5	20	
Nitrogen		77.6	Mol %	0.01				1.0	20	
Carbon Dioxide		0.39	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	
<b>Lab ID: LCS082225</b>								08/22/25 12:59		
	11 Laboratory Control Sample				Run: GC7890_250822A					
Oxygen		0.64	Mol %	0.01	130	70	130			
Nitrogen		6.51	Mol %	0.01	110	70	130			
Carbon Dioxide		0.97	Mol %	0.01	97	70	130			
Methane		76.0	Mol %	0.01	99	70	130			
Ethane		6.01	Mol %	0.01	99	70	130			
Propane		5.00	Mol %	0.01	100	70	130			
Isobutane		1.71	Mol %	0.01	86	70	130			
n-Butane		1.99	Mol %	0.01	100	70	130			
Isopentane		0.49	Mol %	0.01	98	70	130			
n-Pentane		0.50	Mol %	0.01	100	70	130			
Hexanes plus		0.19	Mol %	0.01	92	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

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

# Work Order Receipt Checklist

Euofins TestAmerica - Albuquerque

B25081902

Login completed by: Danielle N. Harris

Date Received: 8/20/2025

Reviewed by: rtooke

Received by: EAH

Reviewed Date: 8/29/2025

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 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:	22.2°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:

The due date requested on the chain of custody is 08/15/25 when the samples were received on 08/20/25. An email was sent to Michele Garcia to confirm the due date. DNH 08/20/25



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](http://www.energylab.com) website:

	Agency	Number
<b>Billings, MT</b>    	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	
<b>Casper, WY</b>  	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	
<b>Gillette, WY</b>	US EPA Region VIII	WY00006
<b>Helena, MT</b>	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



ICOC No:  
885-6182

**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 - Subcontract - Fixed Gases	Fixed Gases

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

# Chain-of-Custody Record

Client: Hilcorp

Turn-Around Time:  Standard  Rush

Project Name: 0 H Randel 5

Project #: \_\_\_\_\_

Project Manager: Kate Kaufman

Sampler: Brandon Sinclair

On Ice:  Yes  No

# of Coolers: 1

Cooler Temp (including CF): N/A (°C)

Container Type and # 2 Tedlar Preservative Type \_\_\_\_\_ HEAL No. \_\_\_\_\_

Date 8-7 Time 1105 Matrix air Sample Name skid 1

Date 8-7 Time 1110 Matrix air Sample Name skid 2

QA/QC Package:  Standard  Level 4 (Full Validation)

Accreditation:  Az Compliance  NELAC  Other

EDD (Type) \_\_\_\_\_

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

Mailing Address: \_\_\_\_\_

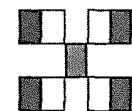
Phone #: \_\_\_\_\_

Relinquished by ya Siml Date 8/7/25 Time 1138

Relinquished by cmwae Date 8/7/25 Time 1138

Received by cmwae Date 8/7/25 Time 1638

Received by of course Date 8/18/25 Time 710



## HALL ENVIRONMENTAL ANALYSIS LABORATORY



www.hallenvironmental.com

885-30532 COC

4901 Hawkins NE - Albuquerque, NM 87109

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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	
8260 (VOA)	<input checked="" type="checkbox"/>
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	<input checked="" type="checkbox"/>
8015 Turbidity	<input checked="" type="checkbox"/>
Fixed gas O <sub>2</sub> & CO <sub>2</sub>	<input checked="" type="checkbox"/>

Remarks:

### Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-30532-1

**Login Number: 30532**

**List Source: Eurofins Albuquerque**

**List Number: 1**

**Creator: Casarrubias, Tracy**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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.	False	Refer to Job Narrative for details.
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kate Kaufman  
 Hilcorp Energy  
 PO BOX 4700  
 Farmington, New Mexico 87499

Generated 12/4/2025 2:33:30 PM

## JOB DESCRIPTION

O H Randel S

## JOB NUMBER

885-37912-1

Eurofins Albuquerque  
 4901 Hawkins NE  
 Albuquerque NM 87109



# Eurofins Albuquerque

## Job Notes

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

## Authorization



Generated  
12/4/2025 2:33:30 PM

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

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

Client: Hilcorp Energy  
Project/Site: O H Randel S

Laboratory Job ID: 885-37912-1

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

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	10
QC Association Summary . . . . .	13
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Subcontract Data . . . . .	18
Chain of Custody . . . . .	26
Receipt Checklists . . . . .	27

## Definitions/Glossary

Client: Hilcorp Energy  
Project/Site: O H Randel S

Job ID: 885-37912-1

## Glossary

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

# Case Narrative

Client: Hilcorp Energy  
Project: O H Randel S

Job ID: 885-37912-1

**Job ID: 885-37912-1**

**Eurofins Albuquerque**

## Job Narrative 885-37912-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 11/18/2025 6:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

### 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

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

### Gasoline Range Organics

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: O H Randel S

Job ID: 885-37912-1

Client Sample ID: Skid 1

Lab Sample ID: 885-37912-1

Date Collected: 11/17/25 13:00

Matrix: Air

Date Received: 11/18/25 06:10

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		5.0	ug/L			11/25/25 18:27	50
1,1,1-Trichloroethane	ND		5.0	ug/L			11/25/25 18:27	50
1,1,2,2-Tetrachloroethane	ND		10	ug/L			11/25/25 18:27	50
1,1,2-Trichloroethane	ND		5.0	ug/L			11/25/25 18:27	50
1,1-Dichloroethane	ND		5.0	ug/L			11/25/25 18:27	50
1,1-Dichloroethene	ND		5.0	ug/L			11/25/25 18:27	50
1,1-Dichloropropene	ND		5.0	ug/L			11/25/25 18:27	50
1,2,3-Trichlorobenzene	ND		5.0	ug/L			11/25/25 18:27	50
1,2,3-Trichloropropane	ND		10	ug/L			11/25/25 18:27	50
1,2,4-Trichlorobenzene	ND		5.0	ug/L			11/25/25 18:27	50
1,2,4-Trimethylbenzene	ND		5.0	ug/L			11/25/25 18:27	50
1,2-Dibromo-3-Chloropropane	ND		10	ug/L			11/25/25 18:27	50
1,2-Dibromoethane (EDB)	ND		5.0	ug/L			11/25/25 18:27	50
1,2-Dichlorobenzene	ND		5.0	ug/L			11/25/25 18:27	50
1,2-Dichloroethane (EDC)	ND		5.0	ug/L			11/25/25 18:27	50
1,2-Dichloropropane	ND		5.0	ug/L			11/25/25 18:27	50
1,3,5-Trimethylbenzene	ND		5.0	ug/L			11/25/25 18:27	50
1,3-Dichlorobenzene	ND		5.0	ug/L			11/25/25 18:27	50
1,3-Dichloropropane	ND		5.0	ug/L			11/25/25 18:27	50
1,4-Dichlorobenzene	ND		5.0	ug/L			11/25/25 18:27	50
1-Methylnaphthalene	ND		20	ug/L			11/25/25 18:27	50
2,2-Dichloropropane	ND		10	ug/L			11/25/25 18:27	50
2-Butanone	ND		50	ug/L			11/25/25 18:27	50
2-Chlorotoluene	ND		5.0	ug/L			11/25/25 18:27	50
2-Hexanone	ND		50	ug/L			11/25/25 18:27	50
2-Methylnaphthalene	ND		20	ug/L			11/25/25 18:27	50
4-Chlorotoluene	ND		5.0	ug/L			11/25/25 18:27	50
4-Isopropyltoluene	ND		5.0	ug/L			11/25/25 18:27	50
4-Methyl-2-pentanone	ND		50	ug/L			11/25/25 18:27	50
Acetone	ND		50	ug/L			11/25/25 18:27	50
<b>Benzene</b>	<b>61</b>		5.0	ug/L			11/25/25 18:27	50
Bromobenzene	ND		5.0	ug/L			11/25/25 18:27	50
Bromodichloromethane	ND		5.0	ug/L			11/25/25 18:27	50
Dibromochloromethane	ND		5.0	ug/L			11/25/25 18:27	50
Bromoform	ND		5.0	ug/L			11/25/25 18:27	50
Bromomethane	ND		15	ug/L			11/25/25 18:27	50
Carbon disulfide	ND		50	ug/L			11/25/25 18:27	50
Carbon tetrachloride	ND		5.0	ug/L			11/25/25 18:27	50
Chlorobenzene	ND		5.0	ug/L			11/25/25 18:27	50
Chloroethane	ND		10	ug/L			11/25/25 18:27	50
Chloroform	ND		5.0	ug/L			11/25/25 18:27	50
Chloromethane	ND		15	ug/L			11/25/25 18:27	50
cis-1,2-Dichloroethene	ND		5.0	ug/L			11/25/25 18:27	50
cis-1,3-Dichloropropene	ND		5.0	ug/L			11/25/25 18:27	50
Dibromomethane	ND		5.0	ug/L			11/25/25 18:27	50
Dichlorodifluoromethane	ND		5.0	ug/L			11/25/25 18:27	50
Ethylbenzene	ND		5.0	ug/L			11/25/25 18:27	50
Hexachlorobutadiene	ND		5.0	ug/L			11/25/25 18:27	50

Eurofins Albuquerque

### Client Sample Results

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

**Client Sample ID: Skid 1**

**Lab Sample ID: 885-37912-1**

Date Collected: 11/17/25 13:00

Matrix: Air

Date Received: 11/18/25 06:10

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	ND		5.0	ug/L			11/25/25 18:27	50
Methyl-tert-butyl Ether (MTBE)	ND		5.0	ug/L			11/25/25 18:27	50
Methylene Chloride	ND		13	ug/L			11/25/25 18:27	50
n-Butylbenzene	ND		15	ug/L			11/25/25 18:27	50
N-Propylbenzene	ND		5.0	ug/L			11/25/25 18:27	50
Naphthalene	ND		10	ug/L			11/25/25 18:27	50
sec-Butylbenzene	ND		5.0	ug/L			11/25/25 18:27	50
Styrene	ND		5.0	ug/L			11/25/25 18:27	50
tert-Butylbenzene	ND		5.0	ug/L			11/25/25 18:27	50
Tetrachloroethene (PCE)	ND		5.0	ug/L			11/25/25 18:27	50
<b>Toluene</b>	<b>140</b>		5.0	ug/L			11/25/25 18:27	50
trans-1,2-Dichloroethene	ND		5.0	ug/L			11/25/25 18:27	50
trans-1,3-Dichloropropene	ND		5.0	ug/L			11/25/25 18:27	50
Trichloroethene (TCE)	ND		5.0	ug/L			11/25/25 18:27	50
Trichlorofluoromethane	ND		5.0	ug/L			11/25/25 18:27	50
Vinyl chloride	ND		5.0	ug/L			11/25/25 18:27	50
<b>Xylenes, Total</b>	<b>27</b>		7.5	ug/L			11/25/25 18:27	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		11/25/25 18:27	50
Toluene-d8 (Surr)	108		70 - 130		11/25/25 18:27	50
4-Bromofluorobenzene (Surr)	108		70 - 130		11/25/25 18:27	50
Dibromofluoromethane (Surr)	97		70 - 130		11/25/25 18:27	50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics [C6 - C10]</b>	<b>6000</b>		250	ug/L			11/24/25 12:55	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		15 - 150		11/24/25 12:55	50

### Client Sample Results

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

**Client Sample ID: Skid 2**

**Lab Sample ID: 885-37912-2**

Date Collected: 11/17/25 13:15

Matrix: Air

Date Received: 11/18/25 06:10

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		5.0	ug/L			11/25/25 18:52	50
1,1,1-Trichloroethane	ND		5.0	ug/L			11/25/25 18:52	50
1,1,2,2-Tetrachloroethane	ND		10	ug/L			11/25/25 18:52	50
1,1,2-Trichloroethane	ND		5.0	ug/L			11/25/25 18:52	50
1,1-Dichloroethane	ND		5.0	ug/L			11/25/25 18:52	50
1,1-Dichloroethene	ND		5.0	ug/L			11/25/25 18:52	50
1,1-Dichloropropene	ND		5.0	ug/L			11/25/25 18:52	50
1,2,3-Trichlorobenzene	ND		5.0	ug/L			11/25/25 18:52	50
1,2,3-Trichloropropane	ND		10	ug/L			11/25/25 18:52	50
1,2,4-Trichlorobenzene	ND		5.0	ug/L			11/25/25 18:52	50
1,2,4-Trimethylbenzene	ND		5.0	ug/L			11/25/25 18:52	50
1,2-Dibromo-3-Chloropropane	ND		10	ug/L			11/25/25 18:52	50
1,2-Dibromoethane (EDB)	ND		5.0	ug/L			11/25/25 18:52	50
1,2-Dichlorobenzene	ND		5.0	ug/L			11/25/25 18:52	50
1,2-Dichloroethane (EDC)	ND		5.0	ug/L			11/25/25 18:52	50
1,2-Dichloropropane	ND		5.0	ug/L			11/25/25 18:52	50
1,3,5-Trimethylbenzene	ND		5.0	ug/L			11/25/25 18:52	50
1,3-Dichlorobenzene	ND		5.0	ug/L			11/25/25 18:52	50
1,3-Dichloropropane	ND		5.0	ug/L			11/25/25 18:52	50
1,4-Dichlorobenzene	ND		5.0	ug/L			11/25/25 18:52	50
1-Methylnaphthalene	ND		20	ug/L			11/25/25 18:52	50
2,2-Dichloropropane	ND		10	ug/L			11/25/25 18:52	50
2-Butanone	ND		50	ug/L			11/25/25 18:52	50
2-Chlorotoluene	ND		5.0	ug/L			11/25/25 18:52	50
2-Hexanone	ND		50	ug/L			11/25/25 18:52	50
2-Methylnaphthalene	ND		20	ug/L			11/25/25 18:52	50
4-Chlorotoluene	ND		5.0	ug/L			11/25/25 18:52	50
4-Isopropyltoluene	ND		5.0	ug/L			11/25/25 18:52	50
4-Methyl-2-pentanone	ND		50	ug/L			11/25/25 18:52	50
Acetone	ND		50	ug/L			11/25/25 18:52	50
<b>Benzene</b>	<b>36</b>		5.0	ug/L			11/25/25 18:52	50
Bromobenzene	ND		5.0	ug/L			11/25/25 18:52	50
Bromodichloromethane	ND		5.0	ug/L			11/25/25 18:52	50
Dibromochloromethane	ND		5.0	ug/L			11/25/25 18:52	50
Bromoform	ND		5.0	ug/L			11/25/25 18:52	50
Bromomethane	ND		15	ug/L			11/25/25 18:52	50
Carbon disulfide	ND		50	ug/L			11/25/25 18:52	50
Carbon tetrachloride	ND		5.0	ug/L			11/25/25 18:52	50
Chlorobenzene	ND		5.0	ug/L			11/25/25 18:52	50
Chloroethane	ND		10	ug/L			11/25/25 18:52	50
Chloroform	ND		5.0	ug/L			11/25/25 18:52	50
Chloromethane	ND		15	ug/L			11/25/25 18:52	50
cis-1,2-Dichloroethene	ND		5.0	ug/L			11/25/25 18:52	50
cis-1,3-Dichloropropene	ND		5.0	ug/L			11/25/25 18:52	50
Dibromomethane	ND		5.0	ug/L			11/25/25 18:52	50
Dichlorodifluoromethane	ND		5.0	ug/L			11/25/25 18:52	50
Ethylbenzene	ND		5.0	ug/L			11/25/25 18:52	50
Hexachlorobutadiene	ND		5.0	ug/L			11/25/25 18:52	50

Eurofins Albuquerque

### Client Sample Results

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

**Client Sample ID: Skid 2**

**Lab Sample ID: 885-37912-2**

Date Collected: 11/17/25 13:15

Matrix: Air

Date Received: 11/18/25 06:10

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	ND		5.0	ug/L			11/25/25 18:52	50
Methyl-tert-butyl Ether (MTBE)	ND		5.0	ug/L			11/25/25 18:52	50
Methylene Chloride	ND		13	ug/L			11/25/25 18:52	50
n-Butylbenzene	ND		15	ug/L			11/25/25 18:52	50
N-Propylbenzene	ND		5.0	ug/L			11/25/25 18:52	50
Naphthalene	ND		10	ug/L			11/25/25 18:52	50
sec-Butylbenzene	ND		5.0	ug/L			11/25/25 18:52	50
Styrene	ND		5.0	ug/L			11/25/25 18:52	50
tert-Butylbenzene	ND		5.0	ug/L			11/25/25 18:52	50
Tetrachloroethene (PCE)	ND		5.0	ug/L			11/25/25 18:52	50
<b>Toluene</b>	<b>110</b>		5.0	ug/L			11/25/25 18:52	50
trans-1,2-Dichloroethene	ND		5.0	ug/L			11/25/25 18:52	50
trans-1,3-Dichloropropene	ND		5.0	ug/L			11/25/25 18:52	50
Trichloroethene (TCE)	ND		5.0	ug/L			11/25/25 18:52	50
Trichlorofluoromethane	ND		5.0	ug/L			11/25/25 18:52	50
Vinyl chloride	ND		5.0	ug/L			11/25/25 18:52	50
<b>Xylenes, Total</b>	<b>24</b>		7.5	ug/L			11/25/25 18:52	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		11/25/25 18:52	50
Toluene-d8 (Surr)	102		70 - 130		11/25/25 18:52	50
4-Bromofluorobenzene (Surr)	104		70 - 130		11/25/25 18:52	50
Dibromofluoromethane (Surr)	96		70 - 130		11/25/25 18:52	50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics [C6 - C10]</b>	<b>3900</b>		250	ug/L			11/24/25 13:39	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		15 - 150		11/24/25 13:39	50

## QC Sample Results

Client: Hilcorp Energy  
Project/Site: O H Randel S

Job ID: 885-37912-1

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

Lab Sample ID: MB 885-39035/4

Matrix: Air

Analysis Batch: 39035

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			11/25/25 16:51	1
1,1,1-Trichloroethane	ND		0.10	ug/L			11/25/25 16:51	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			11/25/25 16:51	1
1,1,2-Trichloroethane	ND		0.10	ug/L			11/25/25 16:51	1
1,1-Dichloroethane	ND		0.10	ug/L			11/25/25 16:51	1
1,1-Dichloroethene	ND		0.10	ug/L			11/25/25 16:51	1
1,1-Dichloropropene	ND		0.10	ug/L			11/25/25 16:51	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			11/25/25 16:51	1
1,2,3-Trichloropropane	ND		0.20	ug/L			11/25/25 16:51	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			11/25/25 16:51	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			11/25/25 16:51	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			11/25/25 16:51	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			11/25/25 16:51	1
1,2-Dichlorobenzene	ND		0.10	ug/L			11/25/25 16:51	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			11/25/25 16:51	1
1,2-Dichloropropane	ND		0.10	ug/L			11/25/25 16:51	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			11/25/25 16:51	1
1,3-Dichlorobenzene	ND		0.10	ug/L			11/25/25 16:51	1
1,3-Dichloropropane	ND		0.10	ug/L			11/25/25 16:51	1
1,4-Dichlorobenzene	ND		0.10	ug/L			11/25/25 16:51	1
1-Methylnaphthalene	ND		0.40	ug/L			11/25/25 16:51	1
2,2-Dichloropropane	ND		0.20	ug/L			11/25/25 16:51	1
2-Butanone	ND		1.0	ug/L			11/25/25 16:51	1
2-Chlorotoluene	ND		0.10	ug/L			11/25/25 16:51	1
2-Hexanone	ND		1.0	ug/L			11/25/25 16:51	1
2-Methylnaphthalene	ND		0.40	ug/L			11/25/25 16:51	1
4-Chlorotoluene	ND		0.10	ug/L			11/25/25 16:51	1
4-Isopropyltoluene	ND		0.10	ug/L			11/25/25 16:51	1
4-Methyl-2-pentanone	ND		1.0	ug/L			11/25/25 16:51	1
Acetone	ND		1.0	ug/L			11/25/25 16:51	1
Benzene	ND		0.10	ug/L			11/25/25 16:51	1
Bromobenzene	ND		0.10	ug/L			11/25/25 16:51	1
Bromodichloromethane	ND		0.10	ug/L			11/25/25 16:51	1
Dibromochloromethane	ND		0.10	ug/L			11/25/25 16:51	1
Bromoform	ND		0.10	ug/L			11/25/25 16:51	1
Bromomethane	ND		0.30	ug/L			11/25/25 16:51	1
Carbon disulfide	ND		1.0	ug/L			11/25/25 16:51	1
Carbon tetrachloride	ND		0.10	ug/L			11/25/25 16:51	1
Chlorobenzene	ND		0.10	ug/L			11/25/25 16:51	1
Chloroethane	ND		0.20	ug/L			11/25/25 16:51	1
Chloroform	ND		0.10	ug/L			11/25/25 16:51	1
Chloromethane	ND		0.30	ug/L			11/25/25 16:51	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			11/25/25 16:51	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			11/25/25 16:51	1
Dibromomethane	ND		0.10	ug/L			11/25/25 16:51	1
Dichlorodifluoromethane	ND		0.10	ug/L			11/25/25 16:51	1
Ethylbenzene	ND		0.10	ug/L			11/25/25 16:51	1
Hexachlorobutadiene	ND		0.10	ug/L			11/25/25 16:51	1

Eurofins Albuquerque

### QC Sample Results

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

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

Lab Sample ID: MB 885-39035/4  
 Matrix: Air  
 Analysis Batch: 39035

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

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Isopropylbenzene	ND		0.10	ug/L			11/25/25 16:51	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			11/25/25 16:51	1
Methylene Chloride	ND		0.25	ug/L			11/25/25 16:51	1
n-Butylbenzene	ND		0.30	ug/L			11/25/25 16:51	1
N-Propylbenzene	ND		0.10	ug/L			11/25/25 16:51	1
Naphthalene	ND		0.20	ug/L			11/25/25 16:51	1
sec-Butylbenzene	ND		0.10	ug/L			11/25/25 16:51	1
Styrene	ND		0.10	ug/L			11/25/25 16:51	1
tert-Butylbenzene	ND		0.10	ug/L			11/25/25 16:51	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			11/25/25 16:51	1
Toluene	ND		0.10	ug/L			11/25/25 16:51	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			11/25/25 16:51	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			11/25/25 16:51	1
Trichloroethene (TCE)	ND		0.10	ug/L			11/25/25 16:51	1
Trichlorofluoromethane	ND		0.10	ug/L			11/25/25 16:51	1
Vinyl chloride	ND		0.10	ug/L			11/25/25 16:51	1
Xylenes, Total	ND		0.15	ug/L			11/25/25 16:51	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	89		70 - 130		11/25/25 16:51	1
Toluene-d8 (Surr)	97		70 - 130		11/25/25 16:51	1
4-Bromofluorobenzene (Surr)	103		70 - 130		11/25/25 16:51	1
Dibromofluoromethane (Surr)	96		70 - 130		11/25/25 16:51	1

Lab Sample ID: LCS 885-39035/3  
 Matrix: Air  
 Analysis Batch: 39035

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	18.4		ug/L		92	70 - 130
Chlorobenzene	20.0	20.8		ug/L		104	70 - 130
Toluene	20.0	20.1		ug/L		100	70 - 130
Trichloroethene (TCE)	20.0	15.7		ug/L		78	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		70 - 130
Toluene-d8 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	104		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130

Eurofins Albuquerque

### QC Sample Results

Client: Hilcorp Energy  
Project/Site: O H Randel S

Job ID: 885-37912-1

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

Lab Sample ID: MB 885-38969/4  
Matrix: Air  
Analysis Batch: 38969

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			11/24/25 12:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		15 - 150				11/24/25 12:12	1

Lab Sample ID: LCS 885-38969/3  
Matrix: Air  
Analysis Batch: 38969

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	51.6		ug/L		103	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	224		15 - 150					

Lab Sample ID: MB 885-39020/4  
Matrix: Air  
Analysis Batch: 39020

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			11/25/25 10:56	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		15 - 150				11/25/25 10:56	1

Lab Sample ID: LCS 885-39020/3  
Matrix: Air  
Analysis Batch: 39020

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	54.6		ug/L		109	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	225		15 - 150					

Lab Sample ID: 885-37912-1 DU  
Matrix: Air  
Analysis Batch: 39020

Client Sample ID: Skid 1  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	6000		6730		ug/L		11	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
4-Bromofluorobenzene (Surr)	126		15 - 150					

Eurofins Albuquerque

### QC Association Summary

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

#### GC/MS VOA

##### Analysis Batch: 39035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-37912-1	Skid 1	Total/NA	Air	8260B	
885-37912-2	Skid 2	Total/NA	Air	8260B	
MB 885-39035/4	Method Blank	Total/NA	Air	8260B	
LCS 885-39035/3	Lab Control Sample	Total/NA	Air	8260B	

#### GC VOA

##### Analysis Batch: 38969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-37912-1	Skid 1	Total/NA	Air	8015D	
885-37912-2	Skid 2	Total/NA	Air	8015D	
MB 885-38969/4	Method Blank	Total/NA	Air	8015D	
LCS 885-38969/3	Lab Control Sample	Total/NA	Air	8015D	

##### Analysis Batch: 39020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-39020/4	Method Blank	Total/NA	Air	8015D	
LCS 885-39020/3	Lab Control Sample	Total/NA	Air	8015D	
885-37912-1 DU	Skid 1	Total/NA	Air	8015D	

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

### Lab Chronicle

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

**Client Sample ID: Skid 1**

**Lab Sample ID: 885-37912-1**

Date Collected: 11/17/25 13:00

Matrix: Air

Date Received: 11/18/25 06:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		50	39035	CM	EET ALB	11/25/25 18:27
Total/NA	Analysis	8015D		50	38969	AT	EET ALB	11/24/25 12:55

**Client Sample ID: Skid 2**

**Lab Sample ID: 885-37912-2**

Date Collected: 11/17/25 13:15

Matrix: Air

Date Received: 11/18/25 06:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		50	39035	CM	EET ALB	11/25/25 18:52
Total/NA	Analysis	8015D		50	38969	AT	EET ALB	11/24/25 13:39

**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

### Accreditation/Certification Summary

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

#### 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-Dichloropropene
8260B		Air	Dibromochloromethane

### Accreditation/Certification Summary

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

#### 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	02-25-26

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

Eurofins Albuquerque

### Accreditation/Certification Summary

Client: Hilcorp Energy  
 Project/Site: O H Randel S

Job ID: 885-37912-1

#### 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



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

# ANALYTICAL SUMMARY REPORT

November 25, 2025

Eurofins TestAmerica - Albuquerque

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

Work Order: B25111724                      Quote ID: B15626

Project Name: 88501698, O H Randel S

Energy Laboratories Inc Billings MT received the following 2 samples for Eurofins TestAmerica - Albuquerque on 11/20/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25111724-001	Skid 1 (885-37912-1)	11/17/25 13:00	11/20/25	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond,/1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60
B25111724-002	Skid 2 (885-37912-2)	11/17/25 13:15	11/20/25	Air	Same As Above

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.

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



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 ANALYTICAL REPORT**

Prepared by Billings, MT Branch

**Client:** Eurofins TestAmerica - Albuquerque  
**Project:** 88501698, O H Randel S  
**Lab ID:** B25111724-001  
**Client Sample ID:** Skid 1 (885-37912-1)

**Report Date:** 11/25/25  
**Collection Date:** 11/17/25 13:00  
**Date Received:** 11/20/25  
**Matrix:** Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>GAS CHROMATOGRAPHY ANALYSIS REPORT</b>							
Oxygen	21.68	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Nitrogen	77.92	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Carbon Dioxide	0.26	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Isopentane	0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
n-Pentane	0.01	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Hexanes plus	0.12	Mol %		0.01		GPA 2261-13	11/21/25 13:22 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj
Isopentane	0.004	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj
n-Pentane	0.004	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj
Hexanes plus	0.051	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj
GPM Total	0.058	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj
GPM Pentanes plus	0.058	gpm		0.001		GPA 2261-13	11/21/25 13:22 / jrj

**CALCULATED PROPERTIES**

Gross BTU per cu ft @ Std Cond. (HHV)	7			1		GPA 2261-13	11/21/25 13:22 / jrj
Net BTU per cu ft @ std cond. (LHV)	6			1		GPA 2261-13	11/21/25 13:22 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-13	11/21/25 13:22 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-13	11/21/25 13:22 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-17	11/21/25 13:22 / jrj
Air, %	99.03			0.01		GPA 2261-13	11/21/25 13:22 / jrj

- The analysis was not corrected for air.

**COMMENTS**

- 11/21/25 13:22 / jrj

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

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

MCL - Maximum Contaminant Level  
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

### LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

**Client:** Eurofins TestAmerica - Albuquerque  
**Project:** 88501698, O H Randel S  
**Lab ID:** B25111724-002  
**Client Sample ID:** Skid 2 (885-37912-2)

**Report Date:** 11/25/25  
**Collection Date:** 11/17/25 13:15  
**DateReceived:** 11/20/25  
**Matrix:** Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>GAS CHROMATOGRAPHY ANALYSIS REPORT</b>							
Oxygen	21.96	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Nitrogen	77.87	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Carbon Dioxide	0.12	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Hexanes plus	0.05	Mol %		0.01		GPA 2261-13	11/21/25 14:17 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj
Hexanes plus	0.021	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj
GPM Total	0.021	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj
GPM Pentanes plus	0.021	gpm		0.001		GPA 2261-13	11/21/25 14:17 / jrj

#### CALCULATED PROPERTIES

Gross BTU per cu ft @ Std Cond. (HHV)	2			1		GPA 2261-13	11/21/25 14:17 / jrj
Net BTU per cu ft @ std cond. (LHV)	2			1		GPA 2261-13	11/21/25 14:17 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-13	11/21/25 14:17 / jrj
Pseudo-critical Temperature, deg R	239			1		GPA 2261-13	11/21/25 14:17 / jrj
Specific Gravity @ 60/60F	0.999			0.001		D3588-17	11/21/25 14:17 / jrj
Air, %	100.33			0.01		GPA 2261-13	11/21/25 14:17 / jrj

- The analysis was corrected for air contamination.

#### COMMENTS

- 11/21/25 14:17 / jrj

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

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

MCL - Maximum Contaminant Level  
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

# QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25111724

Report Date: 11/25/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: GPA 2261-13</b>								Batch: R454215		
<b>Lab ID: B25111724-002ADUP</b>	12 Sample Duplicate				Run: GC7890_251121A			11/21/25 15:06		
Oxygen		22.0	Mol %	0.01				0.0	20	
Nitrogen		77.9	Mol %	0.01				0	20	
Carbon Dioxide		0.12	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		0.06	Mol %	0.01				18	20	
<b>Lab ID: LCS112125</b>								11/21/25 16:46		
11 Laboratory Control Sample				Run: GC7890_251121A						
Oxygen		0.64	Mol %	0.01	130	70	130			
Nitrogen		6.30	Mol %	0.01	107	70	130			
Carbon Dioxide		0.96	Mol %	0.01	96	70	130			
Methane		76.2	Mol %	0.01	100	70	130			
Ethane		6.01	Mol %	0.01	99	70	130			
Propane		5.03	Mol %	0.01	101	70	130			
Isobutane		1.71	Mol %	0.01	86	70	130			
n-Butane		1.98	Mol %	0.01	99	70	130			
Isopentane		0.49	Mol %	0.01	98	70	130			
n-Pentane		0.49	Mol %	0.01	98	70	130			
Hexanes plus		0.19	Mol %	0.01	92	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

## Eurofins TestAmerica - Albuquerque

## B25111724

Login completed by: Leslie S. Cadreau

Date Received: 11/20/2025

Reviewed by: gmccartney

Received by: DNL

Reviewed Date: 11/21/2025

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:	9.0°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](http://www.energylab.com) website:

	Agency	Number
<b>Billings, MT</b>    	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	
<b>Casper, WY</b>  	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	
<b>Gillette, WY</b>	US EPA Region VIII	WY00006
<b>Helena, MT</b>	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090

**Eurofins Albuquerque**  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 Phone: 505-345-3975 Fax: 505-345-4107

### Chain of Custody Record



Environment Testing

<b>Client Information (Sub Contract Lab)</b>	Sampler: N/A	Lab PM: Garcia, Michelle	Carrier Tracking No(s): N/A	COC No: 885-7496.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: michelle.garcia@et.eurofins.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Energy Laboratories, Inc.	Due Date Requested: 11/25/2025	Accreditations Required (See note): NELAP - Oregon; State - New Mexico	Job #: 885-37912-1	Preservation Codes:

Address: 1120 South 27th Street, Billings, MT, 59101	PO #: N/A	State: MT	City: Billings
Phone: 406-252-5325(Tel)	W/O #: N/A	Project #: 88501698	SSOW#: N/A
Site: N/A	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)
	11/17/25	13:00 Mountain	G
	11/17/25	13:15 Mountain	G

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, G=gas, O=oil, B=biomass, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB - Subcontract - Fixed Gases	Total Number of Containers	Special Instructions/Note:
Skid 1 (885-37912-1)	11/17/25	13:00 Mountain	G	Air	X	X	X	1	See Attached Instructions 885-37912-1
Skid 2 (885-37912-2)	11/17/25	13:15 Mountain	G	Air	X	X	X	1	See Attached Instructions

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & 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/matrix 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  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Deliverable Requested: I, II, III, IV, Other (specify) \_\_\_\_\_ Primary Deliverable Rank: 2  
 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date/Time:	Company:	Method of Shipment:
Relinquished by:	Date/Time:	Company:	Date/Time:
Relinquished by:	Date/Time:	Company:	Date/Time:

Custody Seal Intact:  Yes  No  
 Cooler Temperature(s) \_\_\_\_\_ C and Other Remarks: \_\_\_\_\_  
 Received by: *Samuel Anderson*  
 Date/Time: 11/25/2025

Ver: 10/10/2024



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

**ICOC No:**  
885-7496

**Containers**

Count      Container Type  
2              Tedlar Bag 1L

Preservative  
None

**Subcontract Method Instructions**

Sample IDs	Method	Method Description	Method Comments
1, 2	SUBCONTRACT	SUB - Subcontract - Fixed Gases	Fixed Gases

# Chain-of-Custody Record

Client: Hikarp

Turn-Around Time:  Standard  Rush

Project Name: 0 H Randel S

Project #: \_\_\_\_\_

Project Manager: Kate Kaufman

Sampler: Brandon Sinclair

On Ice:  Yes  No

# of Coolers: 1

Cooler Temp (including CF): N/A HEAL No. \_\_\_\_\_

Container Type and # 2 Tedlar

Preservative Type \_\_\_\_\_

Date Time Matrix Sample Name

11-17 1300 air skid 1

11-17 1215 air skid 2

QA/QC Package:  Standard  Level 4 (Full Validation)

Accreditation:  Az Compliance  NELAC  Other

EDD (Type) \_\_\_\_\_

Relinquished by: Brandon Sinclair Date: 11/17/25 1630

Relinquished by: [Signature] Date: 11/17/25 1800



HALL ENVIRONMENTAL ANALYSIS LABORATORY  
 www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109 865-37912 COC  
 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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	
8260 (VOA)	<input checked="" type="checkbox"/>
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	<input checked="" type="checkbox"/>
8015 TRPH	
Fixed gas O <sub>2</sub> & CO <sub>2</sub>	

Received by: [Signature] Date: 11/17/25 1630

Received by: [Signature] Date: 11/17/25 0510

Remarks: \_\_\_\_\_

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



### Login Sample Receipt Checklist

Client: Hilcorp Energy

Job Number: 885-37912-1

**Login Number: 37912**

**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 542779

**CONDITIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 542779
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

**CONDITIONS**

Created By	Condition	Condition Date
nvez	1. Continue monthly O&M schedule as stated in the recommendations section of report. 2. Submit next bi-annual report by July 15, 2026.	1/27/2026