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

April 15, 2025

New Mexico Oil Conservation Division

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

Re: First Quarter 2025 – SVE System Update

> San Juan 32-9 #41A San Juan County, New Mexico Hilcorp Energy Company NMOCD Incident No: NAPP2108949980

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this First Quarter 2025 - SVE System Update report summarizing the soil vapor extraction (SVE) system performance at the San Juan 32-9 #41A natural gas production well (Site) on land managed by the Bureau of Land Management (BLM) in Unit P, Section 31, Township 32 North, Range 9 West in San Juan County, New Mexico (Figure 1). The SVE system was put into full time operation on October 9, 2023, to remediate subsurface soil impacts resulting from approximately 15 barrels (bbls) of natural gas condensate released from an aboveground storage tank. This report summarizes Site activities performed in January, February, and March of 2025.

SVE SYSTEM SPECIFICATIONS

The SVE system at the Site consists of a 3-phase, 5 horsepower Howden Roots 32 URAI rotary lobe blower capable of producing 112 cubic feet per minute (cfm) flow at 82 inches of water column (IWC) vacuum. The system is powered by a permanent power drop and is intended to run 24 hours per day. Three SVE wells are currently in operation and are shown on Figure 2. SVE wells SVE01, SVE02, and SVE03 are screened to 16 feet below ground surface (bgs) to address residual soil impacts in the unsaturated zone.

FIRST QUARTER 2025 ACTIVITIES

The SVE system began operation on October 9, 2023. Based on the New Mexico Oil Conservation Division (NMOCD) Conditions of Approval (COAs), dated March 29, 2023, field data measurements were collected from the system biweekly throughout first quarter 2025. Field measurements included the following parameters: total system flow, estimated flow rates from each SVE well, photoionization detector (PID) measurements of volatile organic compounds (VOCs) from each SVE well, vacuum measurements from each SVE well, and oxygen/carbon dioxide measurements via hand-held analyzers from each SVE well. Field notes taken during operations and maintenance (O&M) visits are presented as Appendix A.

On November 26, 2024, wells SVE02 and SVE03 were taken offline to focus extraction on SVE01, and the blower motor speed was decreased to prevent the vacuum from increasing past the maximum rating; however, following an increase in moisture recovery leading to freezing issues

> Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 848 East 2nd Ave | Durango, CO 81301 | ensolum.com

during the fourth quarter of 2024 and the first quarter of 2025, well SVE03 was brought back online on January 28, 2025, to decrease vacuum on SVE01. Between December 18, 2024 and March 31, 2025, the SVE system operated for 2,377.0 hours for a runtime efficiency of 96 percent (%). Appendix B presents photographs of the runtime meter for calculating the first quarter 2025 runtime efficiency. Table 1 presents the SVE system operational hours and calculated percent runtime.

Based on the March 2023 COAs, vapor samples are required to be collected quarterly following the first year of operation from a sample port located between the SVE piping manifold and the SVE blower using a high vacuum air sampler. A vapor sample was collected on February 10, 2025. Prior to collection, the vapor sample was field screened with a PID for organic vapor monitoring (OVM). The vapor sample was collected directly into two 1-Liter Tedlar® 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, VOCs following EPA Method 8260B, and fixed gas analysis of oxygen and carbon dioxide following Gas Processors Association (GPA) Method 2261. Tables 2 and 3 present a summary of field measurements and analytical data, respectively, collected between system startup and March 31, 2025. The full laboratory analytical report is attached as Appendix C. Graphs 1 and 2 present oxygen and carbon dioxide levels over time, respectively. Vapor samples will continue to be collected quarterly for the remainder of system operation.

Vapor sample data and measured influent flow rates are used to estimate total mass recovered and total emissions generated by the SVE system (Table 4). Based on these estimates, 4,290 pounds (2.15 tons) of TVPH have been removed by the system to date. No phase-separated hydrocarbons were recovered from the system during the O&M and sampling period described above.

DISCUSSION AND RECOMMENDATIONS

A decrease in overall system PID readings and associated mass removal rates has been observed since system startup, as is anticipated. As discussed in the Third Quarter 2024 - SVE System Update, adjustments were made in the fourth quarter of 2024 to attempt to focus vacuum extraction on extraction well SVE01, the location with the highest PID readings; however, following adjustments, a decrease in overall mass removal rates continued and the increased vacuum on a single extraction well led to moisture accumulation and freezing within the system process piping. To decrease moisture accumulation, the blower motor speed was decreased further in the first quarter of 2025 and extraction well SVE03 was brought back online; however, no increase in overall PID readings were noted as moisture accumulation and blockages within the piping continued. Furthermore, freezing issues caused damage to the piping associated with extraction well SVE02 and the well could not be brought back online. Moisture buildup will be removed from the piping, the piping for SVE02 will be repaired, and all three wells will resume operation in the second quarter of 2025. Following the repairs and adjustments, mass removal will continue to be monitored in the second quarter of 2025 and if diminished recovery rates continue to be observed, confirmation soil sampling will be conducted in accordance with the scope provided in the Soil Vapor Extraction Pilot Test Report and Remediation Work Plan, dated January 4, 2023, to determine whether BTEX and TPH concentrations in soil are below the NMOCD Table I Closure Criteria.

Monthly O&M visits, at a minimum, and quarterly sampling events will continue to be performed by Ensolum and/or Hilcorp personnel to ensure the SVE system is operating within normal working ranges (i.e., temperature, pressure, and vacuum). Deviations from regular operations will be noted on field logs and included in the following quarterly report.



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

Sincerely,

Ensolum, LLC

Stuart Hyde, PG (licensed in WA & TX) Senior Managing Geologist

(970) 903-1607 shyde@ensolum.com Daniel R. Moir, PG (licensed in WY & TX) Senior Managing Geologist (303) 887-2946 dmoir@ensolum.com

Attachments:

Figure 1	Site Location Map
Figure 2	SVE System Radius of Influence and Radius of Effect
Table 1	Soil Vapor Extraction System Runtime Calculations
Table 2	Soil Vapor Extraction System Field Measurements
Table 3	Soil Vapor Extraction System Air Analytical Results
Table 4	Soil Vapor Extraction System Mass Removal and Emissions
Graph 1	Oxygen vs Time
Graph 2	Carbon Dioxide vs Time

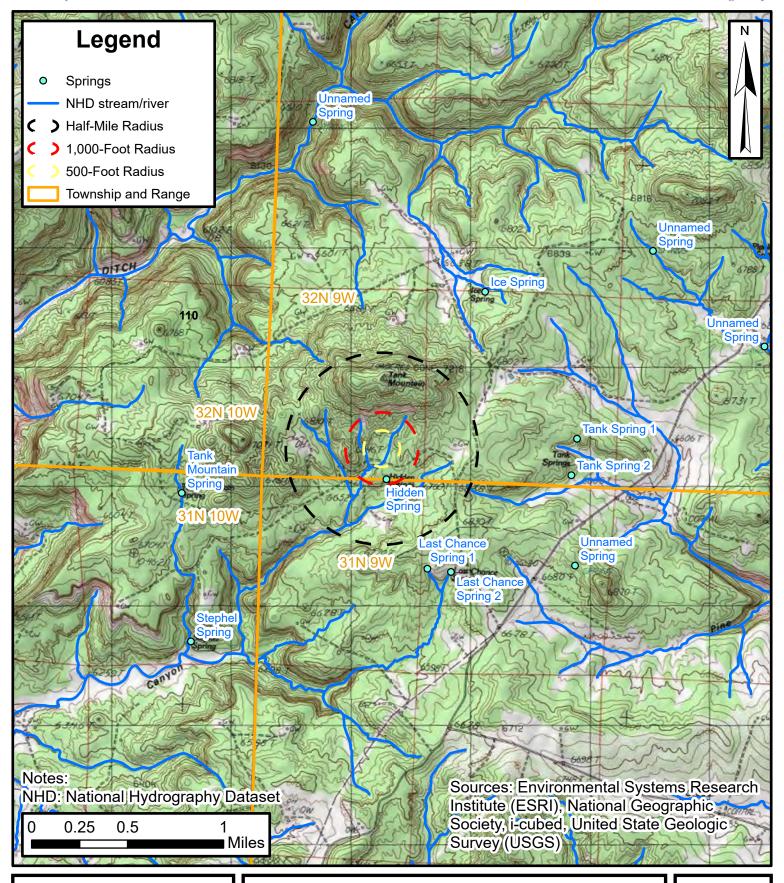
Appendix A Field Notes

Appendix B Project Photographs

Appendix C Laboratory Analytical Reports



Figures



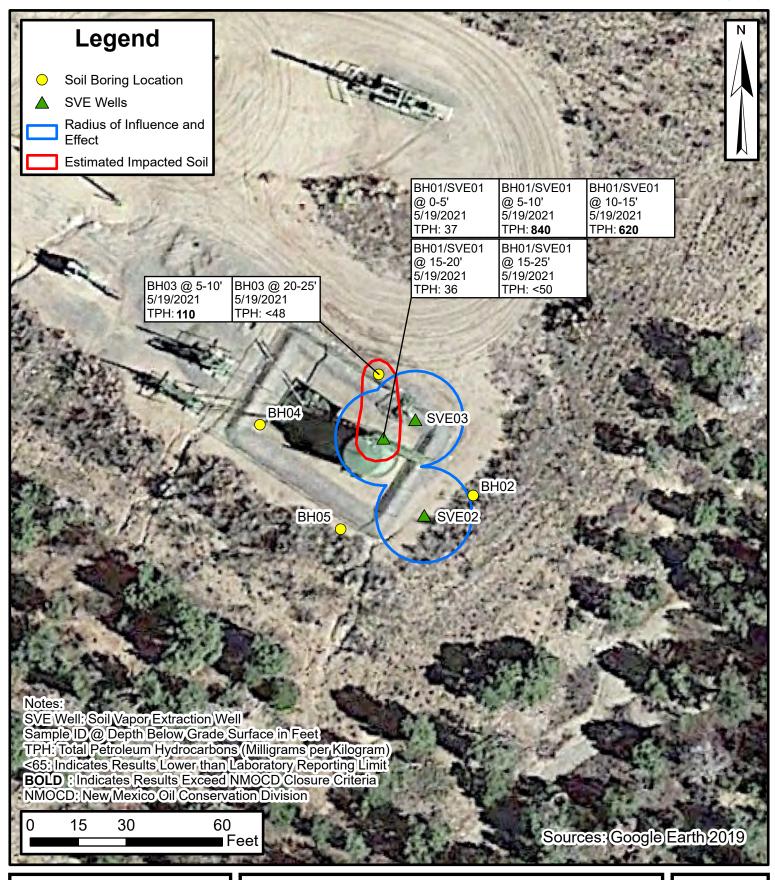


Site Location Map

San Juan 32-9 #41A Hilcorp Energy Company

SEC 31-T32N-R9W San Juan County, New Mexico **FIGURE**

1





SVE System Radius of Influence and Radius of Effect

San Juan 32-9 #41A Hilcorp Energy Company SEC 31-T32N-R9W

SEC 31-T32N-R9W San Juan County, New Mexico **FIGURE**

2



Tables & Graphs

Received by OCD: 4/15/2025 8:32:22 AM



TABLE 1 SOIL VAPOR EXTRACTION SYSTEM RUNTIME CALCULATIONS

San Juan 32-9 #41A Hilcorp Energy Company San Juan County, New Mexico

Date	Total Operational Hours	Delta Hours	Days	Quarterly Percent Runtime	Cumulative Percent Runtime
10/9/2023	1.3		Sta	artup	
12/18/2024	9,982.6				-
1/10/2025	10,535.4	552.8	23	100%	96%
1/28/2025	10,872.2	336.8	18	78%	95%
2/10/2025	11,182.1	309.9	13	99%	95%
2/26/2025	11,567.3	385.2	16	100%	95%
3/12/2025	11,902.9	335.6	14	100%	95%
3/31/2025	12,359.6	456.7	19	100%	96%
			1st Q	uarter 2025 Runtime	96%

Ensolum 1 of 1

ENSOLUM

				TABI	IF 2				•		
			SOIL VAPOR E	XTRACTION SYS San Juan :	STEM FIELD M	EASUREMENTS					
				Hilcorp Energ San Juan Count							
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm) ⁽¹⁾⁽²⁾	Vacuum (IWC)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)		
	10/9/2023	1,783	3.4	161	99	88.0	3.2	20.9	0.00		
	10/10/2023	1,646	3.4	161	99	90.0	3.2	20.9	0.00		
-	10/13/2023	667	4.1	177	118	62.0	2.2	20.1	0.62		
	10/19/2023 10/26/2023	2,143 195	4.9 5.2	194 199	133 137	52.0 52.0	1.9 1.9	20.5	0.40		
•	10/31/2023	440	5.2	199	138	49.0	1.8				
-	11/8/2023	422	5.2	199	136	52.0	1.9	19.8	0.00		
	11/16/2023	541	5.2	199	137	51.7	1.9				
-	11/28/2023	91	5.3	201	137	54.4	2.0				
-	12/7/2023 12/13/2023	231 317	6.0 5.6	214 207	147 141	50.0 54.4	1.8 2.0				
-	12/28/2023	232	5.7	207	140	59.8	2.0				
-	1/19/2024	173	5.0	195	129	62.0	2.2	20.9	0.16		
•	2/7/2024	112	3.4	161	86	131.9	4.8				
	2/20/2024	282	3.9	172	93	127.8	4.6				
[3/5/2024	180	4.0	174	95	125.1	4.5				
}	3/19/2024 4/4/2024	172	2.8	 146	86	102.0	3.7				
-	4/4/2024	172	2.8	146 146	86 84	102.0 108.8	3.7				
ŀ	5/8/2024	175	2.8	147	84	111.5	4.0				
nfluent, All Wells	5/22/2024	98	2.7	143	82	111.5	4.0				
	6/13/2024	110	2.7	143	81	111.5	4.0				
	6/26/2024	44	2.6	140	77	122.4	4.4				
	7/11/2024	39 25	2.5 4.5	139	83 121	96.6 70.7	3.5 2.6				
	7/30/2024 8/13/2024	18	4.5	186 178	117	66.6	2.4				
	8/22/2024	Power Outage									
	9/9/2024	14	4.1	176	118	59.8	2.2				
	9/24/2024	19	4.4	183	124	54.4	2.0				
-	10/15/2024	45	2.6	141	81	110	4.0				
-	10/30/2024 11/12/2024	20	3.8	170	107 System Off - C	81.6 ould Not Restart	2.9				
-	11/26/2024	15		I I		122.4	4.4		I		
-	12/5/2024	121				104.7	3.8				
	12/18/2024	5			-	89.8	3.2	1			
	1/10/2025	107	0.6	65	38	106.1	3.8				
	1/28/2025	6				69.4	2.5				
-	2/10/2025 2/26/2025	22 38	0.5	62 64	35 37	112.9 110.2	4.1 4.0				
-	3/12/2025	26	0.5	64	36	112.9	4.0				
=	3/31/2025	7				118.8	4.3				
	10/9/2023	1,816			34	72.1	2.6	20.9	0.00		
ļ	10/10/2023	1,734			38	73.4	2.6	20.9	0.00		
	10/13/2023	395			>50	39.0	1.4	20.9	0.22		
].	10/19/2023	435			>50	26.0	0.9	20.7	0.28		
}	10/26/2023	116			>50	26.0	0.9	20.2	0.00		
-	10/31/2023	368 437	-		>50 >50	1.8 22.0	0.1	20.5	0.18		
-	11/16/2023	514			>50	21.7	0.8	19.2	0.18		
<u> </u>	11/28/2023	55			>50	22.7	0.8	19.8	0.02		
	12/7/2023	240			>50	22.7	0.8	19.1	0.06		
ļ	12/13/2023	137			>50	22.7	0.8	19.2	0.00		
-	12/28/2023 1/19/2024	275 274			>50 >50	33.3 28.0	1.2 1.0	19.1 20.9	0.02 0.12		
ŀ	2/7/2024	372	0.1	26	15	116.3	4.2	20.9	0.12		
SVE01	2/20/2024	343	0.5	61	35	110.9	4.0	20.9	0.13		
<u> </u>	3/5/2024	276	0.5	59	34	104.3	3.8	20.9	0.12		
[3/19/2024				-		1	1			
ļ	4/4/2024	239	0.2	40	25	77.6	2.8	20.9	0.16		
-	4/16/2024 5/8/2024	189 211	0.3	46 53	28 32	92.0 93.1	3.3 3.4	20.8	0.12 0.12		
-	5/8/2024	147	0.4	45	27	96.2	3.4	20.9	0.12		
ŀ	6/13/2024	181	0.3	47	28	96.3	3.5	20.8	0.15		
ŀ	6/26/2024	64	0.3	45	26	100.6	3.6	20.9	0.13		
<u> </u>	7/11/2024	89	0.2	34	21	88.1	3.2	20.7	0.21		
[7/30/2024	122	0.2	36	22	93.6	3.4	20.8	0.16		
	8/13/2024	79	0.0	12	8 Power	53.7	1.9	20.2	0.37		
-	8/22/2024 9/9/2024	60	0.0	9	Power 6	Outage 46.2	1.7	20.9	0.32		
ŀ	9/24/2024	49	0.0	0	0	41.0	1.5	19.4	0.48		
			0.0		-				J. 10		

E N S O L U M

				TABI	LE 2				
			SOIL VAPOR E	XTRACTION SYS San Juan Hilcorp Energ	32-9 #41A gy Company	EASUREMENTS			
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	San Juan Count	Flow Rate (scfm) ⁽¹⁾⁽²⁾	Vacuum (IWC)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)
	10/15/2024	36	0.1	33	20	92.2	3.3	20.1	0.35
	10/30/2024	57	0.0	9	6	43.7	1.6	20.8	0.40
	11/12/2024	4	1	ı	•	ould Not Restart		20.0	0.47
	11/26/2024 12/5/2024	4 61	0.2	 36	22	85.6	3.1	20.9	0.17 0.34
0) (50 (12/18/2024	2						20.9	0.34
SVE01	1/10/2025	45	0.1	26	18	60.8	2.2	20.9	0.14
	1/28/2025	9			**	68.0	2.5	20.9	0.24
	2/10/2025	25	0.2	40	24	99.3	3.6	20.9	0.06
	2/26/2025 3/12/2025	35 28	0.2	37 38	22	97.4 98.3	3.5 3.5	-	
	3/31/2025	4	0.2			116.9	4.2	20.9	0.04
	10/9/2023	307			2	80.7	2.9	20.9	0.00
	10/10/2023	291			2	83.8	3.0	20.9	0.00
	10/13/2023	84			<2	48.0	1.7	20.9	0.16
	10/19/2023	28			<2	46.0	1.7	20.9	0.28
	10/26/2023	46	-			48.0	1.7	20.7	0.00
	10/31/2023	8			3	3.2	0.1	20.9	0.04
	11/8/2023 11/16/2023	49 95			5 2	44.0 36.5	1.6 1.3	19.6 19.1	0.54 0.46
	11/28/2023	108			3	37.5	1.4	19.6	0.46
	12/7/2023	66			5	39.0	1.4	19.1	0.10
	12/13/2023	50	-		2	39.0	1.4	19.1	0.16
	12/28/2023	30			5	44.8	1.6	19.1	0.00
	1/19/2024	37			4	50.0	1.8	20.9	0.44
	2/7/2024 2/20/2024	56 105	0.0	9	7	20.1 46.6	0.7 1.7	20.9	0.07 0.07
	3/5/2024	96	0.0	0	0	36.1	1.3	20.9	0.07
SVE02	3/19/2024								
SVEOZ	4/4/2024	103	0.0	0	0	41.6	1.5	20.9	0.17
	4/16/2024	89	0.0	0	0	31.2	1.1	20.7	0.14
	5/8/2024	86	0.0	0	0	33.2	1.2	20.7	0.13
	5/22/2024 6/13/2024	79 82	0.0	0	0	44.5 41.6	1.6 1.5	19.5 20.7	0.11 0.12
	6/26/2024	32	0.0	0	0	0.0	0.0	20.6	0.12
	7/11/2024	6				90.2		20.9	0.09
	7/30/2024	10	0.0	0	0	81.1	2.9	20.9	0.11
	8/13/2024	5	2.4	135	91	55.6	2.0	20.9	0.04
	8/22/2024	-	0.5	C4		Outage	4.7	20.0	0.02
	9/9/2024 9/24/2024	5 11	0.5 0.6	64 66	45 46	47.2 43.2	1.7 1.6	20.9	0.03
	10/15/2024	''	0.0	00		en Offline	1.0	20.1	0.00
	10/30/2024	10	0.6	65	46	46.1	1.7	20.9	0.04
	11/12/2024		•			ould Not Restart			
	11/26/2024				Well Tak	en Offline			
	10/9/2023	524			26	76.3	2.8	20.1	0.00
	10/10/2023	411			24	77.2	2.8	19.2	0.00
	10/13/2023 10/19/2023	448 180			18 14	43.0 38.0	1.6 1.4	20.3	0.64
	10/19/2023	77			14	52.0	1.4	20.7	0.00
	10/31/2023	63			14	35.4	1.3	20.9	0.04
	11/8/2023	312			14	36.0	1.3	19.1	0.72
	11/16/2023	315			14	29.4	1.1	19.1	0.26
	11/28/2023	48			14	33.2	1.2	19.6	0.06
	12/7/2023 12/13/2023	134 112			30 14	32.0 36.2	1.2 1.3	19.0 19.1	0.24 0.14
	12/13/2023	71			15	38.1	1.4	19.1	0.14
SVE03	1/19/2024	85			16	28.0	1.0	20.9	0.20
	2/7/2024	33	0.6	69	50	28.0	1.0	20.9	0.05
	2/20/2024	64	0.6	69	39	111.4	4.0	20.9	0.06
	3/5/2024	50	0.9	85	48	111.5	4.0	20.9	0.06
	3/19/2024					 76.0			
	4/4/2024 4/16/2024	47 46	0.5	64 76	41 49	76.2 76.1	2.8	20.9 20.8	0.10
	5/8/2024	49	0.8	77	49	78.6	2.8	20.8	0.08
	5/22/2024	24	1.6	110	65	97.3	3.5	20.3	0.10
	6/13/2024	33	1.3	99	60	92.6	3.3	20.8	0.09
	6/26/2024	15	0.4	54	33	92.5	3.3	20.7	0.08
	7/11/2024	10	8.0	80	50	84.6	3.1	20.9	0.16

ENSOLUM

	TABLE 2 SOIL VAPOR EXTRACTION SYSTEM FIELD MEASUREMENTS San Juan 32-9 #41A Hilcorp Energy Company San Juan County, New Mexico										
SVE Well ID	Date	PID (ppm)	Differential Pressure (IWC)	Flow Rate (acfm)	Flow Rate (scfm) ⁽¹⁾⁽²⁾	Vacuum (IWC)	Vacuum (psi)	Oxygen (%)	Carbon Dioxide (%)		
	7/30/2024	29	1.4	103	64	86.3	3.1	20.8	0.11		
	8/13/2024	7	0.0	15	10	57.3	2.1	20.9	0.14		
	8/22/2024				Power	Outage					
	9/9/2024	4	1.3	101	70	49.6	1.8	20.8	0.18		
	9/24/2024	8	0.9	81	56	46.5	1.7	20.2	0.24		
	10/15/2024	16	3.7	168	101	97.3	3.5	20.8	0.18		
SVE03	10/30/2024	5	0.9	82	57	47.2	1.7	20.9	0.20		
3VE03	11/12/2024				System Off - Co	ould Not Restart					
	11/26/2024				Well Tak	en Offline					
	1/28/2025	3	-			68.0	2.5	20.9	0.12		
	2/10/2025	13	Gauge Broken			97.8	3.5	20.9	0.06		
	2/26/2025	30	Gauge Broken			95.1	3.4				
	3/12/2025	18	Gauge Broken			97.2	3.5				
	3/31/2025	3	-	-		106.4	3.8				

Notes

(1): individual well flow rates in scfm estimated based on rotometer field measurements

(2): total system flow rates in scfm calculated based on pitot tube differential pressure measurements

IWC: inches of water column

PID: photoionization detector

ppm: parts per million

acfm: actual cubic feet per minute

scfm: standard cubic feet per minute

%: percent

--: not measured

Received by OCD: 4/15/2025 8:32:22 AM



TABLE 3

SOIL VAPOR EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS

San Juan 32-9 #41A Hilcorp Energy Company San Juan County, New Mexico

Date	PID (ppm)	Benzene (µg/L)	Toluene (μg/L)	Ethylbenzene (µg/L)	Total Xylenes (μg/L)	TVPH/GRO (µg/L)	Oxygen (%)	Carbon Dioxide (%)
10/9/2023	1,574	46	130	13	130	17,000	19.92%	1.81%
10/10/2023	1,483	17	73	7.6	76	13,000	20.56%	1.03%
10/19/2023	397	<5.0	39	<5.0	110	5,400	21.40%	0.42%
10/31/2023	440	<1.0	14	2.0	73	2,100	21.49%	0.35%
11/8/2023	422	<0.50	12	2.0	92	3,400	21.56%	0.28%
11/16/2023	541	<5.0	9.6	<5.0	64	2,600	21.43%	0.23%
11/28/2023	91	<0.10	0.91	0.14	6.6	350	21.67%	0.06%
12/13/2023	317	<0.50	3.3	0.60	27	1,400	21.72%	0.18%
12/28/2023	232	<0.50	2.7	0.59	23	1,400	21.56%	0.19%
1/19/2024	173	<0.50	1.3	<0.50	8.1	560	21.78%	0.17%
3/5/2024	180	0.49	9.9	<2.0	21	980	21.78%	0.21%
5/8/2024	175	<1.0	2.1	<1.0	8.4	560	21.58%	0.24%
7/30/2024	25	<1.0	1.0	<1.0	2.0	670	21.28%	0.27%
9/9/2024	19	<0.10	1.2	0.11	2.1	96 H	21.80%	0.24%
11/26/2024	15	<0.10	0.14	<0.10	0.15	7.9	21.07%	0.22%
2/10/2025	22	< 0.50	2.7	< 0.50	3.2	66	21.19%	0.18%

Notes:

GRO: gasoline range hydrocarbons

μg/L: microgram per liter

PID: photoionization detector

ppm: parts per million

TVPH: total volatile petroleum hydrocarbons

%: percent

gray indicates result less than the stated laboratory reporting limit (RL)

H: Sample was analyzed outside of the required hold time

Ensolum 1 of 1



TABLE 4 SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS San Juan 32-9 #41A Hilcorp Energy Company San Juan County, New Mexico

Laboratory Analysis

			Laboratory Analysi			
Date	PID (ppm)	Benzene (μg/L)	Toluene (μg/L)	Ethylbenzene (μg/L)	Total Xylenes (μg/L)	TVPH (μg/L)
10/9/2023	1,574	46	130	13	130	17,000
10/10/2023	1,483	17	73	7.6	76	13,000
10/19/2023	397	5.0	39	5.0	110	5,400
10/31/2023	440	1.0	14	2.0	73	2,100
11/8/2023	422	0.50	12	2.0	92	3,400
11/16/2023	541	5.0	10	5.0	64	2,600
11/28/2023	91	0.10	0.91	0.14	6.6	350
12/13/2023	317	0.50	3.3	0.60	27	1,400
12/28/2023	232	0.50	2.7	0.59	23	1,400
1/19/2024	173	0.50	1.3	0.50	8.1	560
3/5/2024	180	0.50	9.9	2.0	21	980
5/8/2024	175	1.0	2.1	1.0	8.4	560
7/30/2024	25	1.0	1.0	1.0	2.0	670
9/9/2024 ⁽¹⁾	19	0.10	1.2	0.11	2.1	96
11/26/2024	15	0.10	0.14	0.10	0.15	7.9
2/10/2025	22	0.50	2.7	0.50	3.2	66
Average	382	5	19	3	40	3,099

Vapor Extraction Summary

Date	Flow Rate (scfm)	Total System Flow (cf)	Delta Flow (cf)	Benzene (lb/hr)	Toluene (lb/hr)	Ethylbenzene (lb/hr)	Total Xylenes (lb/hr)	TVPH (lb/hr)		
10/9/2023	System Startup									
10/10/2023	99	152,658	152,658	0.0117	0.038	0.0038	0.038	5.6		
10/19/2023	133	1,872,348	1,719,690	0.0048	0.024	0.0027	0.040	4.0		
10/31/2023	138	4,228,836	2,356,488	0.00152	0.0134	0.00177	0.046	1.9		
11/8/2023	136	-	-	-	-	-	-	-		
11/16/2023	137	7,402,578	3,173,742	0.00154	0.0061	0.00180	0.035	1.21		
11/28/2023	137	9,767,472	2,364,894	0.00131	0.0027	0.00132	0.018	0.76		
12/13/2023	141	12,791,076	3,023,604	0.00016	0.0011	0.00019	0.009	0.45		
12/28/2023	140	15,806,676	3,015,600	0.00026	0.0016	0.00031	0.013	0.74		
1/19/2024	129	19,893,396	4,086,720	0.00025	0.0010	0.00027	0.008	0.49		
3/5/2024	95	26,037,996	6,144,600	0.00021	0.0023	0.00052	0.006	0.32		
5/8/2024	84	32,781,516	6,743,520	0.00025	0.0020	0.00050	0.005	0.26		
7/30/2024	117	46,729,554	13,948,038	0.00038	0.0006	0.00038	0.002	0.23		
9/9/2024	124	53,941,890	7,212,336	0.00025	0.0005	0.00025	0.001	0.17		
11/26/2024(2)	107	65,635,278	11,693,388	0.00004	0.0003	0.00005	0.000	0.02		
2/10/2025	35	68,878,518	3,243,240	0.00008	0.0004	0.00008	0.000	0.01		
			Average	0.0016	0.007	0.0010	0.016	1.2		

Mass Recovery

				made reductory					
Date	Total Operational Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)	
10/9/2023	System Startup								
10/10/2023	26	26	0.30	0.97	0.098	0.98	143	0.071	
10/19/2023	241	216	1.03	5.2	0.59	8.7	860	0.43	
10/31/2023	526	285	0.43	3.8	0.50	13.2	541	0.27	
11/8/2023		-	-		-	-		-	
11/16/2023	912	386	0.60	2.3	0.69	13.6	467	0.23	
11/28/2023	1,200	288	0.38	0.77	0.38	5.2	217	0.109	
12/13/2023	1,557	357	0.06	0.39	0.07	3.1	163	0.081	
12/28/2023	1,916	359	0.09	0.57	0.11	4.7	264	0.132	
1/19/2024	2,444	528	0.13	0.53	0.14	4.1	260	0.130	
3/5/2024	3,522	1,078	0.23	2.53	0.56	6.6	348	0.174	
5/8/2024	4,860	1,338	0.34	2.69	0.67	6.6	345	0.172	
7/30/2024	6,847	1,987	0.75	1.16	0.75	3.9	459	0.230	
9/9/2024	7,816	969	0.24	0.48	0.24	0.9	167	0.084	
11/26/2024	9,638	1,821	0.08	0.53	0.08	0.9	41	0.020	
2/10/2025	11,182	1,544	0.12	0.58	0.12	0.7	15	0.008	
	Total Ma	ss Recovery to Date	4.8	22.6	5.0	73	4,290	2.15	

cf: cubic feet

scfm: cubic feet per minute

μg/L: micrograms per liter

lb/hr: pounds per hour

PID: photoionization detector

ppm: parts per million

TVPH: total volatile petroleum hydrocarbons

--: not measured

gray: laboratory reporting limit used for calculating emissions

(1) TVPH analyzed outside of required hold time
(2) Flow rate for 11/26/24 mass removal and emissions calculations is estimated based on flow rate collected on 10/30/24



APPENDIX A

Field Notes

SAN JUAN 32-9 #41A SVE SYSTEM **O&M FORM**

DATE: TIME ONSITE:		O&M PERSONNEL: TIME OFFSITE:	and the second s	ir	
		SVE SYSTEM - MONTHI	Y O&M		
SVE ALARMS:		KO TANK HIGH LEVEL			
		Check/Date			
WEEKLY MAINTENANCE:	Blower Bearing Grease	WA /			
QUARTERLY MAINTENANCE:	Blower Oil Change				
SVE SYSTEM	READING	TIME			
Blower Hours (take photo)		952			
Total Flow (scfm)			and the same of th		
Inlet Vacuum (IHG)	1 01				
Differential Pressure (IWC)	1 0 0				
Inlet PID	100		and the second		
Exhaust PID	A William			don't had necessary	
Inlet Temperature K/O Tank Liquid Level	95				
K/O Liquid Drained (gallons)	10				
NO Liquid Diamed (gallons)	13				
	SI	VE SYSTEM - QUARTERLY	SAMPLING		
SAMPLE ID:		SAMPLE TIME:	OAIIII EIITO		
		ery other week) for TVPH (80	15) BTEX (8260) Fixe	d Gas (CO2 AND O2)	
OPERATING WELLS		by outer week) for 1 vi ii (oc	10), BIEX (0200), I IXO	d 040 (002 / 1110 02)	
OI EIGHTING WEELE					
Change in Well Operation:					
WELLHEAD MEASUREMENTS			diff pre	1	
WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	FLOW (CFM)	OXYGEN	CARBON DIOXIDE
SVE01	60.8	45.3	-0.09	20,9	1380
SVEOZ	PER CHARLES TO THE CO.				
-SVE03		是是一个人,但是一个人的一个人,也是一个人的一个人。 第一个人的一个人的一个人的一个人的一个人的一个人的一个人的一个人的一个人的一个人的			

COMMENTS/OTHER MAINTENANCE:

. Tank frozen on arrival i heat trace non-functional.

Thaued ice and drained tank.

■ ENSOLUM

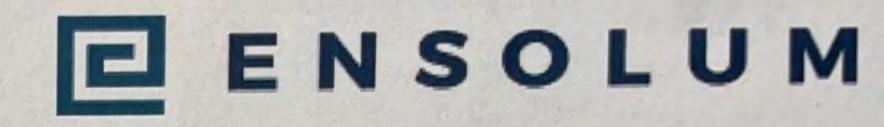
DAM JUAN 32-9 MATA SVE SYSTEM DAM FORM

SVE ALARMS		KO TANK HIGH LEVEL	10.10	NA	January V
Name of the state		Check/Date	System	LUNNING	upon arrive
WEEKLY MAINTENANCE: HARTERLY MAINTENANCE:			VICK	10	CH 0 59
DANTERET MARKETERANTE	Device de driange		VED	Set (0)	33.0 Hz
SVE SYSTEM	READING	TIME	1.04 1.00	nin 1	The Later
Blower Hours (take photo)	10872.2	13:20	- ralibrate	(11) W/ 100g	pm isobolylane
Total Flow (scfm)		1.12	-C-Mile	, , , , , , , ,	
Inlet Vacuum (IHG) Differential Pressure (IWC)		ING			4
Inlet PID			Influent	0xy-20.	7 111
Exhaust PID	18.0		2.64	1n + n.2	7 40.1
Exhast later emperature	100 F	11 11-		102	
K/O Tank Liquid Level K/O Liquid Drained (garions)	~ 6 jules in	ight free			
NO Oqua Oramec (ganons)	11 301				
	SV	E SYSTEM - QUARTERLY	SAMPLING		
SAMPLE ID:	N/A	SAMPLE TIME:	MA	The state of the same of	
Analytes	Sample Bi-Weekly (ever	y other week) for TVPH (80	15), BTEX (8260), Fixe	aken w	St.
OPERATING WELLS	JAE 01 4	03. A	07 13 60	order 6 M	
	D . 1 1	IFD up to	~45 H	Vac	up to ~7.5
Change in Well Operation:	lurned 1	LD up to	12 12	-	1
ELLHEAD MEASUREMENTS				- Vol	12
	VACUUM (IHG)	PID HEADSPACE (PPM)	FLOW (CFM)	OXYGEN	CARBON DIOXIDE
		4		20.9	0.24
WELL ID SVE01	5	4			
WELL ID	5			20.4	0.12

ENSOLUM

SAN JUAN 32-9 #41A SVE SYSTEM O&M FORM

TIME ONSITE:	2-10	O&M PERSONNEL: TIME OFFSITE:	B Sindle	ir	
		SVE SYSTEM - MONTHI	LY O&M		
SVE ALARMS:[KO TANK HIGH LEVEL			
WEEKLY MAINTENANCE:	Blower Bearing Grease Blower Oil Change	Check/Date /			
SVE SYSTEM Blower Hours (take photo) Total Flow (scfm) Inlet Vacuum (IHG) Differential Pressure (IWC) Inlet PID	8.3	TIME 113 Y			
Exhaust PID e Inlet Temperature K/O Tank Liquid Level K/O Liquid Drained (gallons)	177.5				
SAMPLE ID:	SVF-1	VE SYSTEM - QUARTERLY SAMPLE TIME:	SAMPLING 1700		
Analytes: OPERATING WELLS	Sample Bi-Weekly (eve	SAMPLE TIME: ery other week) for TVPH (80	15), BTEX (8260), Fixed	Gas (CO2 AND C	02)
Change in Well Operation:			1		
WELLHEAD MEASUREMENTS			diff pres		
WELL ID SVE01	VACUUM (IHG)	PID HEADSPACE (PPM)	-FLOW (CFM)	OXYGEN ZO.q	CARBON DIOXID
SVE03	97.8	12.7	4,52	20.9	580
COMMENTS/OTHER MAINTEN	ANCE:				



SAN JUAN 32-9 #41A SVE SYSTEM O&M FORM

DATE:	2-26	O&M PERSONNEL: TIME OFFSITE:			
		SVE SYSTEM - MONTH	LY O&M		
SVE ALARMS:[KO TANK HIGH LEVEL			
WEEKLY MAINTENANCE:	Blower Bearing Grease	Check/Date			
QUARTERLY MAINTENANCE:	Blower Oil Change				
SVE SYSTEM	READING	TIME			
Blower Hours (take photo)	11567.3	1258			
Total Flow (sofm)					
Inlet Vacuum (IHG) Differential Pressure (IWC)					
Inlet PID					
Exhaust PID	12.1				
Inlet Temperature K/O Tank Liquid Level					
K/O Liquid Drained (gallons)					
		VE SYSTEM - QUARTERLY	SAMPLING		
SAMPLE ID:		SAMPLE TIME:			
		ery other week) for TVPH (80	15), BTEX (8260), Fixed	Gas (CO2 AND O	2)
OPERATING WELLS					
Change in Well Operation:					
WELLHEAD MEASUREMENTS	S		diff pres		
WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	FLOW (CFM)	OXYGEN	CARBON DIOXIDE
SVE01	97,4	35.2	-0.18		
SVE03	95.1	29.7	4.12		
COMMENTS/OTHER MAINTER	NANCE:				
COMMENTO/OTTILITION					



SAN JUAN 32-9 #41A SVE SYSTEM O&M FORM

DATE: TIME ONSITE:	3-12	O&M PERSONNEL: TIME OFFSITE:	B Sinclair		
		SVE SYSTEM - MONTHL	Y O&M		
SVE ALARMS:[KO TANK HIGH LEVEL			
WEEKLY MAINTENANCE: QUARTERLY MAINTENANCE:	Blower Booring Conse	Check/Date			
SVE SYSTEM	READING	TIME			
Blower Hours (take photo)	11902.9	135 Z			
Inlet Vacuum (IHG) Differential Pressure (IWC)	8.3				
Exhaust PID ex Inlet Temperature	10.3				
K/O Tank Liquid Level K/O Liquid Drained (gallons)					
SAMPLE ID:		/E SYSTEM - QUARTERLY SAMPLE TIME:	SAMPLING		
	Sample Bi-Weekly (eve	ery other week) for TVPH (80°	15), BTEX (8260), Fixed	Gas (CO2 AND O	2)
Change in Well Operation:					
WELLHEAD MEASUREMENTS			diff pres		
WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	FLOW (CEM)	XYGEN	CARBON DIOXIDE
SVE01 SVE02 SVE03	97.2	17.9	4.51		
COMMENTS/OTHER MAINTEN	IANCE:				
COMMENTO					

Received by OCD: 4/15/2025 8:32:22 AM

SAN JUAN 32-9 #41A SVE SYSTEM O&M FORM

DATE: 3/31/25
TIME ONSITE:

O&M PERSONNEL: MOUL
TIME OFFSITE:

Page 20 of 48

		SVE SYSTEM - MONTHL	Y 08.M		
SVE ALARMS:		KO TANK HIGH LEVEL			
		Check/Date			
WEEKLY MAINTENANCE:	Blower Bearing Grease				
QUARTERLY MAINTENANCE:	Blower Oil Change				
SVE SYSTEM	READING	TIME			
Blower Hours (take photo)					
Total Flow (scfm)					
Inlet Vacuum (IHG)	118.8				
Differential Pressure (IWC)					
Inlet PID					
Exhaust PID	117				
Inlet Temperature					
K/O Tank Liquid Level K/O Liquid Drained (gallons)					
100 Liquid Diamed (gallons)					
	SI	VE SYSTEM - QUARTERLY	SAMPLING		
SAMPLE ID:		SAMPLE TIME:			30.5333
		ery other week) for TVPH (801	5), BTEX (8260), Fixe	ed Gas (CO2 AND O)2)
OPERATING WELLS					The same
Change in Well Operation:					
Ondinge in vien Operation.					
MELL HEAD MEACHDEMENTS					
WELLHEAD MEASUREMENTS WELL ID	VACUUM (IHG)	PID HEADSPACE (PPM)	ELOW/ (CEM)	OXYGEN	CADE
SVE01	16.9	4.0	FLOW (CFM)	20.9	CARE
SVE02	BROKAN	7.0	TO A	20.	400
SVE03	106.4	2.7	NA	20.9	44
COMMENTS/OTHER MAINTENA					
SVEOR Well hea	a broken, value	L-to vac manifold is	of (-		
Flowmeters floode	4	Filter wet/rusted			1-6-1
Flow meters 1 wood					
Prained 10 galle	ons from KO +	onh, valve stuck			
			The second second second		The state of the s
Added oil and go	reuse 10 motor	5			
Characed blower	De 1+				



APPENDIX B

Project Photographs

PROJECT PHOTOGRAPHS

San Juan 32-9 #41A San Juan County, New Mexico Hilcorp Energy Company

Photograph 1

Runtime meter taken on December 18, 2024 at 9:05 AM Hours = 9,982.6



Photograph 2

Runtime meter taken on March 31, 2025 at 2:36 PM Hours = 12,359.6





APPENDIX C

Laboratory Analytical Reports

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/28/2025 4:31:09 PM

JOB DESCRIPTION

SJ 32-9 41A

JOB NUMBER

885-19667-1

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 2/28/2025 4:31:09 PM

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

2

5

6

8

40

11

12

Laboratory Job ID: 885-19667-1

Client: Hilcorp Energy Project/Site: SJ 32-9 41A

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Subcontract Data	16
Chain of Custody	23
Receint Checklists	24

11

13

Definitions/Glossary

Client: Hilcorp Energy Job ID: 885-19667-1
Project/Site: SJ 32-9 41A

Glossary

LOD

LOQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
\(\phi \)	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)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

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 Job ID: 885-19667-1 Project: SJ 32-9 41A

Job ID: 885-19667-1 **Eurofins Albuquerque**

> Job Narrative 885-19667-1

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

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

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

Receipt

The sample was received on 2/11/2025 7:20 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.4°C.

Subcontract Work

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

Gasoline Range Organics

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

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

Client Sample Results

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

Client Sample ID: SVE-1 Lab Sample ID: 885-19667-1

Date Collected: 02/10/25 12:00 Matrix: Air

Date Received: 02/11/25 07:20 Sample Container: Tedlar Bag 1L

Method: SW846 8015M/D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 -	66		25	ug/L			02/21/25 12:55	5
C10]								

Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103	52 - 172	02/21/25 12:55	

Analyte	Result Qu	alifier RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L			02/21/25 12:55	5
1,1,1-Trichloroethane	ND	0.50	ug/L			02/21/25 12:55	5
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L			02/21/25 12:55	5
1,1,2-Trichloroethane	ND	0.50	ug/L			02/21/25 12:55	5
1,1-Dichloroethane	ND	0.50	ug/L			02/21/25 12:55	5
1,1-Dichloroethene	ND	0.50	ug/L			02/21/25 12:55	5
1,1-Dichloropropene	ND	0.50	ug/L			02/21/25 12:55	5
1,2,3-Trichlorobenzene	ND	0.50	ug/L			02/21/25 12:55	5
1,2,3-Trichloropropane	ND	1.0	ug/L			02/21/25 12:55	5
1,2,4-Trichlorobenzene	ND	0.50	ug/L			02/21/25 12:55	5
1,2,4-Trimethylbenzene	ND	0.50	ug/L			02/21/25 12:55	5
1,2-Dibromo-3-Chloropropane	ND	1.0	ug/L			02/21/25 12:55	5
1,2-Dibromoethane (EDB)	ND	0.50	ug/L			02/21/25 12:55	5
1,2-Dichlorobenzene	ND	0.50	ug/L			02/21/25 12:55	5
1,2-Dichloroethane (EDC)	ND	0.50	ug/L			02/21/25 12:55	5
1,2-Dichloropropane	ND	0.50	ug/L			02/21/25 12:55	5
1,3,5-Trimethylbenzene	ND	0.50	ug/L			02/21/25 12:55	5
1,3-Dichlorobenzene	ND	0.50	ug/L			02/21/25 12:55	5
1,3-Dichloropropane	ND	0.50	ug/L			02/21/25 12:55	5
1,4-Dichlorobenzene	ND	0.50	ug/L			02/21/25 12:55	5
1-Methylnaphthalene	ND	2.0	ug/L			02/21/25 12:55	5
2,2-Dichloropropane	ND	1.0	ug/L			02/21/25 12:55	5
2-Butanone	ND	5.0	ug/L			02/21/25 12:55	5
2-Chlorotoluene	ND	0.50	ug/L			02/21/25 12:55	5
2-Hexanone	ND	5.0	ug/L			02/21/25 12:55	5
2-Methylnaphthalene	ND	2.0	ug/L			02/21/25 12:55	5
4-Chlorotoluene	ND	0.50	ug/L			02/21/25 12:55	5
4-Isopropyltoluene	ND	0.50	ug/L			02/21/25 12:55	5
4-Methyl-2-pentanone	ND	5.0	ug/L			02/21/25 12:55	5
Acetone	ND	5.0	ug/L			02/21/25 12:55	5
Benzene	ND	0.50	ug/L			02/21/25 12:55	5
Bromobenzene	ND	0.50	ug/L			02/21/25 12:55	5
Bromodichloromethane	ND	0.50	ug/L			02/21/25 12:55	5
Dibromochloromethane	ND	0.50	ug/L			02/21/25 12:55	5
Bromoform	ND	0.50	ug/L			02/21/25 12:55	5
Bromomethane	ND	1.5	ug/L			02/21/25 12:55	5
Carbon disulfide	ND	5.0	ug/L			02/21/25 12:55	5
Carbon tetrachloride	ND	0.50	ug/L			02/21/25 12:55	5
Chlorobenzene	ND	0.50	ug/L			02/21/25 12:55	5
Chloroethane	ND	1.0	ug/L			02/21/25 12:55	5
Chloroform	ND	0.50	ug/L			02/21/25 12:55	5

Client Sample Results

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

Client Sample ID: SVE-1 Lab Sample ID: 885-19667-1 Date Collected: 02/10/25 12:00

Matrix: Air

Date Received: 02/11/25 07:20 Sample Container: Tedlar Bag 1L

Analyte	Result Qualifi	er RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND —	1.5	ug/L			02/21/25 12:55	5
cis-1,2-Dichloroethene	ND	0.50	ug/L			02/21/25 12:55	5
cis-1,3-Dichloropropene	ND	0.50	ug/L			02/21/25 12:55	5
Dibromomethane	ND	0.50	ug/L			02/21/25 12:55	5
Dichlorodifluoromethane	ND	0.50	ug/L			02/21/25 12:55	5
Ethylbenzene	ND	0.50	ug/L			02/21/25 12:55	5
Hexachlorobutadiene	ND	0.50	ug/L			02/21/25 12:55	5
Isopropylbenzene	ND	0.50	ug/L			02/21/25 12:55	5
Methyl-tert-butyl Ether (MTBE)	ND	0.50	ug/L			02/21/25 12:55	5
Methylene Chloride	ND	1.5	ug/L			02/21/25 12:55	5
n-Butylbenzene	ND	1.5	ug/L			02/21/25 12:55	5
N-Propylbenzene	ND	0.50	ug/L			02/21/25 12:55	5
Naphthalene	ND	1.0	ug/L			02/21/25 12:55	5
sec-Butylbenzene	ND	0.50	ug/L			02/21/25 12:55	5
Styrene	ND	0.50	ug/L			02/21/25 12:55	5
tert-Butylbenzene	ND	0.50	ug/L			02/21/25 12:55	5
Tetrachloroethene (PCE)	ND	0.50	ug/L			02/21/25 12:55	5
Toluene	2.7	0.50	ug/L			02/21/25 12:55	5
trans-1,2-Dichloroethene	ND	0.50	ug/L			02/21/25 12:55	5
trans-1,3-Dichloropropene	ND	0.50	ug/L			02/21/25 12:55	5
Trichloroethene (TCE)	ND	0.50	ug/L			02/21/25 12:55	5
Trichlorofluoromethane	ND	0.50	ug/L			02/21/25 12:55	5
Vinyl chloride	ND	0.50	ug/L			02/21/25 12:55	5
Xylenes, Total	3.2	0.75	ug/L			02/21/25 12:55	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		02/21/25 12:55	5	
Toluene-d8 (Surr)	98		70 - 130		02/21/25 12:55	5	
4-Bromofluorobenzene (Surr)	100		70 - 130		02/21/25 12:55	5	
Dibromofluoromethane (Surr)	104		70 - 130		02/21/25 12:55	5	

Job ID: 885-19667-1 Client: Hilcorp Energy

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

Project/Site: SJ 32-9 41A

Lab Sample ID: MB 885-21215/5 **Matrix: Air**

Analysis Batch: 21215

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

MB MB Result Qualifier RL Unit Dil Fac Analyte D Prepared Analyzed Gasoline Range Organics [C6 - C10] ND 5.0 ug/L 02/21/25 12:06

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 98 52 - 172 02/21/25 12:06

Lab Sample ID: LCS 885-21215/4 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Air

Analysis Batch: 21215

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits

500 536 ug/L Gasoline Range Organics [C6 -

ND

ND

ND

C10]

LCS LCS

Surrogate %Recovery Qualifier Limits

4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 885-21216/5 Client Sample ID: Method Blank **Prep Type: Total/NA**

Matrix: Air

Analysis Batch: 21216

MB MB Result Qualifier Analyte RL Unit Prepared Analyzed Dil Fac ND 1,1,1,2-Tetrachloroethane 0.10 02/21/25 12:06 ug/L 1,1,1-Trichloroethane ND 0.10 ug/L 02/21/25 12:06 1,1,2,2-Tetrachloroethane ND 0.20 ug/L 02/21/25 12:06 1,1,2-Trichloroethane ND 0.10 ug/L 02/21/25 12:06 1,1-Dichloroethane ND 0.10 ug/L 02/21/25 12:06 1,1-Dichloroethene ND 0.10 ug/L 02/21/25 12:06 1,1-Dichloropropene ND 0.10 ug/L 02/21/25 12:06 ND 1,2,3-Trichlorobenzene 0.10 ug/L 02/21/25 12:06 1,2,3-Trichloropropane ND 0.20 ug/L 02/21/25 12:06 1,2,4-Trichlorobenzene NΠ 0.10 ug/L 02/21/25 12:06 1,2,4-Trimethylbenzene ND 0.10 ug/L 02/21/25 12:06 1,2-Dibromo-3-Chloropropane ND 0.20 ug/L 02/21/25 12:06 1,2-Dibromoethane (EDB) ND 0.10 ug/L 02/21/25 12:06 ND 0.10 ug/L 02/21/25 12:06 1.2-Dichlorobenzene 1,2-Dichloroethane (EDC) ND 0.10 ug/L 02/21/25 12:06 ND 0.10 1,2-Dichloropropane ug/L 02/21/25 12:06 1,3,5-Trimethylbenzene ND 0.10 ug/L 02/21/25 12:06 ND 0.10 ug/L 02/21/25 12:06 1 3-Dichlorobenzene 1,3-Dichloropropane ND 0.10 ug/L 02/21/25 12:06 1,4-Dichlorobenzene ND 0.10 ug/L 02/21/25 12:06 ND ug/L 1-Methylnaphthalene 0.40 02/21/25 12:06 2,2-Dichloropropane ND 0.20 ug/L 02/21/25 12:06

Eurofins Albuquerque

02/21/25 12:06

02/21/25 12:06

02/21/25 12:06

1.0

0.10

1.0

ug/L

ug/L

ug/L

2-Butanone

2-Hexanone

2-Chlorotoluene

QC Sample Results

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

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

Lab Sample ID: MB 885-21216/5

Matrix: Air

Analysis Batch: 21216

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.40	ug/L			02/21/25 12:06	1
4-Chlorotoluene	ND		0.10	ug/L			02/21/25 12:06	1
4-Isopropyltoluene	ND		0.10	ug/L			02/21/25 12:06	1
4-Methyl-2-pentanone	ND		1.0	ug/L			02/21/25 12:06	1
Acetone	ND		1.0	ug/L			02/21/25 12:06	1
Benzene	ND		0.10	ug/L			02/21/25 12:06	1
Bromobenzene	ND		0.10	ug/L			02/21/25 12:06	1
Bromodichloromethane	ND		0.10	ug/L			02/21/25 12:06	1
Dibromochloromethane	ND		0.10	ug/L			02/21/25 12:06	1
Bromoform	ND		0.10	ug/L			02/21/25 12:06	1
Bromomethane	ND		0.30	ug/L			02/21/25 12:06	1
Carbon disulfide	ND		1.0	ug/L			02/21/25 12:06	1
Carbon tetrachloride	ND		0.10	ug/L			02/21/25 12:06	1
Chlorobenzene	ND		0.10	ug/L			02/21/25 12:06	1
Chloroethane	ND		0.20	ug/L			02/21/25 12:06	1
Chloroform	ND		0.10	ug/L			02/21/25 12:06	1
Chloromethane	ND		0.30	ug/L			02/21/25 12:06	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			02/21/25 12:06	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			02/21/25 12:06	1
Dibromomethane	ND		0.10	ug/L			02/21/25 12:06	1
Dichlorodifluoromethane	ND		0.10	ug/L			02/21/25 12:06	1
Ethylbenzene	ND		0.10	ug/L			02/21/25 12:06	1
Hexachlorobutadiene	ND		0.10	ug/L			02/21/25 12:06	1
Isopropylbenzene	ND		0.10	ug/L			02/21/25 12:06	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			02/21/25 12:06	1
Methylene Chloride	ND		0.30	ug/L			02/21/25 12:06	1
n-Butylbenzene	ND		0.30	ug/L			02/21/25 12:06	1
N-Propylbenzene	ND		0.10	ug/L			02/21/25 12:06	1
Naphthalene	ND		0.20	ug/L			02/21/25 12:06	1
sec-Butylbenzene	ND		0.10	ug/L			02/21/25 12:06	1
Styrene	ND		0.10	ug/L			02/21/25 12:06	1
tert-Butylbenzene	ND		0.10	ug/L			02/21/25 12:06	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			02/21/25 12:06	1
Toluene	ND		0.10	ug/L			02/21/25 12:06	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			02/21/25 12:06	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			02/21/25 12:06	1
Trichloroethene (TCE)	ND		0.10	ug/L			02/21/25 12:06	1
Trichlorofluoromethane	ND		0.10	ug/L			02/21/25 12:06	1
Vinyl chloride	ND		0.10	ug/L			02/21/25 12:06	1
Xylenes, Total	ND		0.15	ug/L			02/21/25 12:06	1

MB MB

S	Surrogate	%Recovery	Qualifier	Limits	Prepared A	nalyzed	Dil Fac
1	,2-Dichloroethane-d4 (Surr)	108		70 - 130	02/2	1/25 12:06	1
7	oluene-d8 (Surr)	96		70 - 130	02/2	1/25 12:06	1
4	-Bromofluorobenzene (Surr)	96		70 - 130	02/2	1/25 12:06	1
E	ibromofluoromethane (Surr)	104		70 - 130	02/2	1/25 12:06	1

QC Sample Results

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

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

Lab Sample ID: LCS 885-21216/4

Matrix: Air

Analysis Batch: 21216

Client Sample	ID: Lab C	ontrol	Sample
	Prep	Type: 1	Total/NA

•	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethene	20.1	18.5		ug/L		92	70 - 130	
Benzene	20.1	20.3		ug/L		101	70 - 130	
Chlorobenzene	20.1	19.1		ug/L		95	70 - 130	
Toluene	20.2	19.2		ug/L		95	70 - 130	
Trichloroethene (TCE)	20.2	19.3		ug/L		96	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
Toluene-d8 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	96		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130

5

6

8

9

11

12

QC Association Summary

Client: Hilcorp Energy

Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

GC/MS VOA

Analysis Batch: 21215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-19667-1	SVE-1	Total/NA	Air	8015M/D	
MB 885-21215/5	Method Blank	Total/NA	Air	8015M/D	
LCS 885-21215/4	Lab Control Sample	Total/NA	Air	8015M/D	

Analysis Batch: 21216

Lab Sample ID 885-19667-1	Client Sample ID SVE-1	Prep Type Total/NA	Matrix Air	Method 8260B	Prep Batch
MB 885-21216/5	Method Blank	Total/NA	Air	8260B	
LCS 885-21216/4	Lab Control Sample	Total/NA	Air	8260B	

Eurofins Albuquerque

2

5

6

7

ŏ

1 N

11

12

Lab Chronicle

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

Client Sample ID: SVE-1 Lab Sample ID: 885-19667-1 Date Collected: 02/10/25 12:00

Matrix: Air

Date Received: 02/11/25 07:20

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015M/D		5	21215	СМ	EET ALB	02/21/25 12:55
Total/NA	Analysis	8260B		5	21216	CM	EET ALB	02/21/25 12:55

Laboratory References:

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

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

Accreditation/Certification Summary

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

Laboratory: Eurofins Albuquerque

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

Authority	Progra	am	Identification Number	Expiration Date
New Mexico	State		NM9425, NM0901	02-26-25
,	s are included in this repo does not offer certification	•	not certified by the governing authori	ty. This list may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015M/D		Air	Gasoline Range Organics	s [C6 - C10]

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

Eurofins Albuquerque

3

5

9

11

12

Accreditation/Certification Summary

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

Laboratory: Eurofins Albuquerque (Continued)

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

nority	Progra	ım	Identification Number Expiration Date
,	•	•	not certified by the governing authority. This list may include analyte
,	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
gon	NELAF		NM100001 02-25-25

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

Analysis Method	Prep Method	Matrix	Analyte
8015M/D		Air	Gasoline Range Organics [C6 - C10]
8260B		Air	1,1,1,2-Tetrachloroethane
8260B		Air	1,1,1-Trichloroethane
8260B		Air	1,1,2,2-Tetrachloroethane
8260B		Air	1,1,2-Trichloroethane
8260B		Air	1,1-Dichloroethane
8260B		Air	1,1-Dichloroethene
8260B		Air	1,1-Dichloropropene
8260B		Air	1,2,3-Trichlorobenzene
8260B		Air	1,2,3-Trichloropropane
8260B		Air	1,2,4-Trichlorobenzene
8260B		Air	1,2,4-Trimethylbenzene
8260B		Air	1,2-Dibromo-3-Chloropropane
8260B		Air	1,2-Dibromoethane (EDB)
8260B		Air	1,2-Dichlorobenzene
8260B		Air	1,2-Dichloroethane (EDC)
8260B		Air	1,2-Dichloropropane
8260B		Air	1,3,5-Trimethylbenzene
8260B		Air	1,3-Dichlorobenzene
8260B		Air	1,3-Dichloropropane
8260B		Air	1,4-Dichlorobenzene

Eurofins Albuquerque

367-1

6

5

5

7

9

10

11

14

Accreditation/Certification Summary

Client: Hilcorp Energy Job ID: 885-19667-1

Project/Site: SJ 32-9 41A

Laboratory: Eurofins Albuquerque (Continued)

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

ority	Progra	am	Identification Number Expiration Date
The following analyte:	s are included in this repo	rt. but the laboratory is i	not certified by the governing authority. This list may include anal
	does not offer certification	•	, 3 3 , , ,
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

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

2

DEDODT

ANALYTICAL SUMMARY REPORT

February 13, 2025

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

Work Order: B25020581 Quote ID: B15626

Project Name: SJ 32-9 41A - 88501698

Energy Laboratories Inc Billings MT received the following 1 sample for Eurofins TestAmerica - Albuquerque on 2/12/2025 for analysis.

Lab ID	Client Sample ID	Collect Date Receive Date	Matrix	Test
B25020581-001	SVE-1 (885-19667-1)	02/10/25 12:00 02/12/25	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.

ge 1 of 7 2/28/2025

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: SJ 32-9 41A - 88501698

Lab ID: B25020581-001

Client Sample ID: SVE-1 (885-19667-1)

Report Date: 02/13/25 Collection Date: 02/10/25 12:00 DateReceived: 02/12/25

Matrix: Air

02/13/25 11:57 / jrj

					MCL/		
Analyses	Result	Units	Qualifiers	RL	QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS	REPORT						
Oxygen	21.19	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Nitrogen	78.63	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Carbon Dioxide	0.18	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Hydrogen Sulfide	< 0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Ethane	< 0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Propane	< 0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
n-Pentane	< 0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-13	02/13/25 11:57 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-13	02/13/25 11:57 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-13	02/13/25 11:57 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-13	02/13/25 11:57 / jrj
Pseudo-critical Pressure, psia	544			1		GPA 2261-13	02/13/25 11:57 / jrj
Pseudo-critical Temperature, deg R	239			1		GPA 2261-13	02/13/25 11:57 / jrj
Specific Gravity @ 60/60F	0.998			0.001		D3588-81	02/13/25 11:57 / jrj
Air, % - The analysis was not corrected for air.	96.82			0.01		GPA 2261-13	02/13/25 11:57 / jrj

- BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior.

COMMENTS

RL - Analyte Reporting Limit MCL - Maximum Contaminant Level Report

Definitions: QCL - Quality Control Limit ND - Not detected at the Reporting Limit (RL)

⁻ 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.



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

QA/QC Summary Report

Prepared by Billings, MT Branch

Work C	Order: B25020581							Repo	rt Date:	02/13/25	
Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	GPA 2261-13									Batch:	R436824
Lab ID:	B25020581-001ADUP	12 Sa	mple Duplic	ate			Run: GC78	90_250213A		02/13	/25 12:46
Oxygen			21.3	Mol %	0.01				0.7	20	
Nitrogen			78.5	Mol %	0.01				0.2	20	
Carbon D	ioxide		0.18	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	e		<0.01	Mol %	0.01					20	
n-Butane			< 0.01	Mol %	0.01					20	
Isopentar	ne		<0.01	Mol %	0.01					20	
n-Pentan	е		<0.01	Mol %	0.01					20	
Hexanes	plus		<0.01	Mol %	0.01					20	
Lab ID:	LCS021325	11 Lal	boratory Co	ntrol Sample			Run: GC78	90_250213A		02/13	/25 14:25
Oxygen			0.64	Mol %	0.01	128	70	130			
Nitrogen			6.22	Mol %	0.01	104	70	130			
Carbon D	ioxide		0.99	Mol %	0.01	100	70	130			
Methane			74.5	Mol %	0.01	100	70	130			
Ethane			6.06	Mol %	0.01	101	70	130			
Propane			5.04	Mol %	0.01	102	70	130			
Isobutane	e		1.76	Mol %	0.01	88	70	130			
n-Butane			2.00	Mol %	0.01	100	70	130			
Isopentar	ne		0.99	Mol %	0.01	99	70	130			
n-Pentan	е		1.00	Mol %	0.01	100	70	130			
Hexanes	plus		0.79	Mol %	0.01	99	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



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 B25020581

_ogin completed by:	Kyelie L. Pflock		Date	Received: 2/12/2025							
Reviewed by:	gmccartney		Re	eceived by: LEL							
Reviewed Date:	2/13/2025		Carrier name: FedEx NDA								
Shipping container/cooler in	good condition?	Yes ✓	No 🖂	Not Present ☐							
Custody seals intact on all s	hipping container(s)/cooler(s)?	Yes ✓	No 🗌	Not Present							
Custody seals intact on all s	ample bottles?	Yes	No 🗌	Not Present ✓							
Chain of custody present?		Yes ✓	No 🗌								
Chain of custody signed who	en relinquished and received?	Yes ✓	No 🗌								
Chain of custody agrees with	h sample labels?	Yes ✓	No 🗌								
Samples in proper container	/bottle?	Yes √	No 🗌								
Sample containers intact?		Yes ✓	No 🗌								
Sufficient sample volume for	r indicated test?	Yes ✓	No 🗌								
All samples received within I Exclude analyses that are c such as pH, DO, Res CI, Su	onsidered field parameters	Yes 🗹	No 🗌								
Гетр Blank received in all s	hipping container(s)/cooler(s)?	Yes	No 🔽	Not Applicable							
Container/Temp Blank temp	erature:	3.6°C No Ice									
Containers requiring zero he oubble that is <6mm (1/4").	adspace have no headspace or	Yes	No 🗌	No VOA vials submitted ✓							
Vater - pH acceptable upon	receipt?	Yes	No 🗌	Not Applicable ✓							

Standard Reporting Procedures:

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

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

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

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

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

Contact and Corrective Action Comments:

None

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

Laboratory Certifications and Accreditations

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

	Agency	Number						
	Alaska	17-023						
	California	3087						
	Colorado	MT00005						
	Department of Defense (DoD)/ISO17025	ADE-2588						
Billings, MT	Florida (Primary NELAP)	E87668						
	Idaho	MT00005						
d	Louisiana	05079						
ANAB	Montana	CERT0044						
ARSI Namonal Accinentation Where A C C R E D I T E D	Nebraska	NE-OS-13-04						
TESTING LABORATORY	Nevada	NV-C24-00250						
a scene.	North Dakota	R-007						
	National Radon Proficiency	109383-RMP						
700	Oregon	4184						
DEALOR	South Dakota	ARSD 74:04:07						
	Texas	TX-C24-00302						
	US EPA Region VIII	Reciprocal						
	USDA Soil Permit	P330-20-00170						
	Washington	C1039						
	Alaska	20-006						
	California	3021						
	Colorado	WY00002						
	Florida (Primary NELAP)	E87641						
	Idaho	WY00002						
	Louisiana	05083						
Casper, WY	Montana	CERT0002						
No according	Nebraska	NE-OS-08-04						
	Nevada	NV-C24-00245						
ROBITOR	North Dakota	R-125						
	Oregon	WY200001						
	South Dakota	WY00002						
	Texas	T104704181-23-21						
	US EPA Region VIII	WY00002						
	USNRC License	49-26846-01						
	Washington	C1012						
Gillette, WY	US EPA Region VIII	WY00006						
4 1 1 1 1	Colorado	MT00945						
Helena, MT	Montana	CERT0079						
120000000000000000000000000000000000000	Nevada	NV-C24-00119						
	US EPA Region VIII	Reciprocal						
	USDA Soil Permit	P330-20-00090						

age 5 of 7 2/28/2025

Eurofins Albuquerque

4901 Hawkins NE

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

Chain of Custody Record

L.	SP 330
24	
r.	XOCE
F	17-4

eurofins

Environment Testing

Shipping Reviews Pure Pure	Client Information (Sub Contract Lab)	Sampler: N/A				ib PM: arcia, N	/liche	lle					arrier Trad	king No	(s):			OC No: 35-3857.1		
Preservation Codes:							narci	a@at	eurofi	neue /	nom						Pa	ige:		
Sample Identification - Client ID (Lab ID) Sample Identification						Accr	editatio	ns Re	quired	See no	ite):	_	ew Mex	ico						
11/2 Security 27th Street	The state of the s	Due Date Reguest	to di			NEI	AP -	Oreg	jon; St	ate - N	New Mex	ico						V		
Sample Identification - Client ID (Lab ID) Sample Identification			tea:				Analysis						netad				Pr	eservation	Codes:	
International Control of the Control	Dity:	TAT Requested (d							1		arysis i	tequ	steu	1						
MT. 59101 MORA NO. 8 NO. 9 NO. 8			N/A	\																
106-252-239(TeV) MA NA NA NA NA NA NA NA NA NA	ИТ, 59101																			
MA NA NA SEO 1698 Sample Identification - Client ID (Lab ID) Sample ID (Sample ID (Sam															1					
MA STORY MA MA MA STORY MA MA STORY MA MA STORY MA MA STORY MA MA MA STORY MA MA STORY MA MA STORY MA MA STORY MA MA MA STORY MA MA STORY MA MA MA MA STORY MA MA STORY MA MA MA STORY MA MA MA STORY MA MA MA MA MA STORY MA MA MA MA MA STORY MA MA MA STORY MA MA MA MA MA MA STORY MA MA STORY MA MA MA MA MA MA STORY MA MA MA STORY MA MA MA MA MA MA MA MA STORY MA MA MA MA MA MA MA MA MA M	mail:					2			1											
Rescribed in the Size of Crigoria Bed of Crigo	W. 1	N/A				lo s	ON SON										un			
Preservation Code: VE-1 (885-19687-1) 2/10/25 Mountain G Air X X See Attached Instructions See Attached Instructions (S252.25 58) See Attached Instructions (S252.25 58) Air X X See Attached Instructions (S252.25 58) Air X X Air X Air X		Project #:				3	0 0	3									i i i			
Preservation Code: VE-1 (885-19667-1) 2/10/25 Air X	ite:					- eld	E S										E L			
Preservation Code: 2/10/25 12:00 Mountain G Air X X	N/A					Sam	es/		1								200			
Preservation Code: 2/10/25 12:00 G Air X X X X X X X X X				Sample	Matrix	De la	Gas			1	1.1						100			
Preservation Code: 2/10/25 12:00 G Air X X X X X X X X X				Type			ixec						1 1							
Preservation Code: VE-1 (885-19667-1) 2/10/25 Air X	Sample Identification - Client ID (Lab ID)	Sample Date			O=waste/oil,	등	JB						1 1							
NE-1 (885-19667-1) 2/10/25 12:00 Mountain G Air X X I I I See Attached Instructions By 5/20/25 581 1 See Attached Instructions See Attached Instructi	The state of the s	Sample Date	Time			ir) III (, S		Gland							j	_ارف	Specia	Instruct	ions/Note
Mountain Mounta	VE-1 (885-19667-1)	2/10/25	12:00			Y											۷_			
te: 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, analyte & accreditation states about be brought to Eurofins Environment Testing South Central, LLC aboratory or other instructions will be provided. Any charredation status about be brought to Eurofins Environment Testing South Central, LLC aboratory or other instructions will be provided. Any charredation status about be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the algebre chain of Custody stessing to said compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the opined Chain of Custody stessing to said compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the opined Chain of Custody stessing to said compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the opined Chain of Custody stessing to said compliance to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return to Client Disposal By Lab Archive For Months Special Instructions/OC Requirements: Sample Disposal By Lab Archive For Months Date/Time: Company Received by: Date/Time: Company C		2/10/25	Mountain	G	Air		Х										1 See	Attached	52502	0581
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client																				
creditation 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, before the control of the contr												_								
Company Comp							+					-								
creditation 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, before the control of the contr						\perp														
creditation 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, before the control of the contr																	nil.			
Creditation 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, possible Hazard Identification Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client							-1-													
creditation 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, before the control of the contr						+	+	-		+	+	-		-			HOR			
creditation 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, before the control of the contr						\perp														
Company Comp																				
Company Comp		- 1																		
Company Comp	ote: Since laboratory accreditations are subject to change. Eurofins Envi	ronment Testing South Cent	ral II C places	the aumorah	in of moth-d		200							_						
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) moonfirmed eliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements: mpty Kit Relinquished by: Date/Time: Date/Time: Date/Time: Date/Time: Company Received by: Date/Time: Company Company Received by: Date/Time: Company Received by: Date/Time: Company Comp	boratory does not currently maintain accreditation in the State of Origin is	sted above for analysis/tests	matrix being a	analyzed, the	samples must	be shipp	ed ba	ck to th	n compi ne Eurot	iance u ins Env	pon our sui rironment T	esting S	t laborato outh Cen	ries. Th	is samp	le shipn orv or o	nent is t	orwarded un	der chain-of	-custody. If
Archive For Months Company Comp		uth Central, LLC attention in	nmediately. If a	all requested	accreditations	or o odin	3111 10 1	acto, re	atain are	signed	Chair or	Justody	attesting	to said c	omplian	ce to Eu	irofins	Environment	Testing Sou	ith Central,
Inquished by: Date: Date: Time: Method of Shipment: Date/Time: Date/Time: Company Received by: Date/Time: Date/Time: Company Received by: Date/Time: Company Company Received by: Date/Time: Company						Sa	ample	Dis	posal	(A fe	e may be	asses	sed if	sample	es are	retain	ed lo	nger than	1 month)	
mpty Kit Relinquished by: Date: Time: Method of Shipment:		Drimon, Deliver	bl- Danis A				F	Returr	To C	lient			sal By I	ab	9	Arch	ive F	or	Mont	ths
Date/Time: Date/Time: Company Received by: Date/Time: Company		Filmary Delivera	ble Rank: 2			Sp	pecial	Instr	uction	s/QC I	Requiren	ents:								
Date/Time: Date/Time: Company Received by: Date/Time: Company			Date:			Time					Method of				nent:					
Date/Time: Company Received by: Date/Time: Company	linquished by:	Date/Time:	2	22	Company	_	Rec	eived t	y:					_					Compar	nv
Inquished by: Date/Time: Company Received by: Company Received by: Company Like Date/Time: Company Company Like Company Compa	linquished by:		> 1)	.,_	C															
Custody Soals Intest Country Soal No.					Company		Kec	eived b	by:					Date	/Time:				Compar	ny
Custody Seals Intact: Custody Seal No.: FLT -B	linquished by:	Date/Time:			Company		Rec	eiy e d t	у:	-	00			Date	/Time:				Compar	nv.
	Custody Seals Intact: Custody Seal No		X					Ty	ob	- 1	tek	and	-	03	102	251	2:10	5	ELI	C-B
																			Ver: 10	The same of



1

2

3

4

5

6

7

8

q

4.0

11

12

ICOC No: 885-3857 Containers
Count
Count
Tedlar Bag 1L

Subcontract Method Instructions
Sample IDs Method Method Description

Sample IDs Method Subcontract Subcontract

Method Comments Fixed Gases

Preservative None

Page 22 of 24

\overline{z}
(C)
ä
~
-
0
<u> </u>
-
\approx
-
\sim
• •
ь.
4
-
-
1.
Ζ,
12
9
1
12
5
_
00
1
1
-
N .
1
—
~
~

C	Chain-of-Custody Record				Turn-Around Time:						n &				a' -dr- m=	_	m 7 m				
Client:	4:100	٠		- I ⊈ ⊢Standard	□ Rush	•													N	IA	<u> </u>
L	1100	P		Project Name														R/	l _F	L.L.	ė.
Mailing	Address	»:		-	. 4	. 1	www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109												년 탄		
				5 J 32 - 9 41 A Project #:										•	•				885-1	9667	coc
Phone :	#•			-			Tel. 505-345-3975 Fax 505-345-4107 [885-19667 6667] Analysis Request														
		randa	, Sindair@hileorp.com	Project Mana	naer							<u></u>	188111818185m	96	I.Ve.d	(50000N0500A)		7			
QA/QC	Package:	J Waday	13 In our property	T rojoot mane	igor.		021)	MRO	3's		<u>S</u>		, SO ₄			seni		707	, 		
	□ Standard □ Level 4 (Full Validation)				Eaufman		TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's		8270SIMS		NO ₂ , PO ₄ ,			Total Coliform (Present/Absent)		210	,		
Accredi	Accreditation: □ Az Compliance				anden Sin	dair	IMB	띪	082	F	827(102,			eser	Ŧ	1		ı	
□ NEL		□ Other		On Ice:	□ Yes ∠			RO	8/se	EDB (Method 504.1)	or (<u>s</u>			8270 (Semi-VOA)	(Pre	TVPH	200			
	(Type) _. T	1		# of Coolers:		<u> </u>	MTBE/	9)	icid	Pod	3310	1eta	8	A	n-i-V	orm	\vdash	1			
				Coolei Temp	(Including CF).	60.2>10.4 (°C)	⊻	015	est	Met	by 8	8 1	Ŗ,	ΛΟ/	Sen	Solif	5	6	.	}	
				Container	Preservative	HEAL No.	BTEX/	H:8	18) B(PAHs by 8310 or	RCRA 8 Metals	Cl, F, Br, NO ₃ ,	8260 (VOA)) 02	tal (5108	Fixed			
Date	Time	Matrix	Sample Name	Type and #	Туре		B	브	8	Ш	<u>-</u>	꼾	ਹ	82	82		8	\overrightarrow{A}			
2-10	1200	air	SVE-1	2 Tedlar		****								$\sqrt{}$				$\sqrt{\ }$			
																		\neg		一	
										\neg								\neg	\dashv	_	-
																		-			
																			_	\dashv	
																			\dashv	\dashv	
									}									\dashv		\dashv	
																			_		
Date Time Relinquished by:			Received by.	Via.	Date Time	Remarks:															
2/10/25	2/10/25 1623 Pr Sin 1			Ma. A. [00] - 2/10/25 11023																	
Date	Date: Time. Relinguished by:			Received by: Via: Date Time																	ļ
2/10/25	1812	1 Ch	1. + 1 \ 0 l=	1000str 2/11/25-7:20																	
્રા	<u> </u>	, samples sub	omitted to Hall Environmental may be sub-	contracted to other a	ccredited laboratorie		possi	bility	Any sı	ıb-con	tracte	d data	will be	clear	lv nota	ted on	the ar	nalytica	al reoc	rt.	

age 46 of 4

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-19667-1

Login Number: 19667 List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins Albuquerque

1

3

4

6

8

10

11

12

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 452024

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	452024
	Action Type:
	[REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Create By	d Condition	Condition Date
nvel	1. Continue O&M & sampling as stated in report. 2. Submit next quarterly report by July 15, 2025.	4/16/2025