ENSOLUM

January 11, 2024

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

Re: Fourth Quarter 2023 – SVE System Update
Scott 4M
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: NCE2003650476

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Fourth Quarter 2023 –SVE System Update* report summarizing the soil vapor extraction (SVE) system performance at the Scott 4M natural gas production well (Site), located in Section 17, Township 31 North, and Range 10 West in San Juan County (Figure 1). The SVE system has operated since January 2021 to remediate subsurface soil impacts resulting from approximately 42 barrels (bbls) of natural gas condensate released from an aboveground storage tank. This report summarizes Site activities performed in October, November, and December of 2023.

SVE SYSTEM SPECIFICATIONS

An upgraded SVE system was installed at the Site at the end of September 2022 and consists of 3-phase, 3.4 horsepower Republic Model KVHRC500 blower capable of producing a flow of 221 cubic feet per minute (cfm) and a vacuum of 76 inches of water column (IWC). The system is powered by a permanent power drop and is intended to run 24 hours per day. Seven SVE wells are currently present at the Site (SVE01 through SVE07, shown on Figure 2). SVE wells SVE01 through SVE03 are screened at depth intervals ranging from 25 feet to 45 feet below ground surface (bgs) in order to remediate deep soil impacts located at the Site. SVE wells SVE04 and SVE05 are screened at depth intervals ranging from 5 feet to 25 feet bgs in order to remediate shallow soil impacts at the Site. SVE wells SVE06 and SVE07 were installed at the Site in order to complete the pilot test conducted in 2021; however, these wells are not located in impacted areas and are not connected to the permanent SVE system.

FOURTH QUARTER 2023 ACTIVITIES

During the fourth quarter of 2023, Ensolum and Hilcorp personnel performed bi-weekly operation and maintenance (O&M) visits to ensure the system was operating as designed and to perform any required maintenance. Field notes taken during O&M visits are presented in Appendix A. During the fourth quarter of 2023, vacuum was applied to SVE wells SVE01 through SVE05 in order to induce flow in impacted soil zones. Between September 27 and December 20, 2023, the SVE system operated for 2,014.7 hours for a runtime efficiency of 100 percent (%). Photographs

of the runtime meter for calculating the fourth quarter runtime efficiency are presented as Appendix B. The SVE system operational hours and calculated percent runtime are presented in Table 1.

A fourth quarter 2023 air sample was collected on November 27, 2023, from a sample port located between the SVE piping manifold and the SVE blower, using a high vacuum air sampler. Prior to collection, the emission sample was field screened with a photoionization detector (PID) for organic vapor monitoring (OVM). The emission sample was collected directly into two 1-Liter Tedlar® bags and submitted to Eurofins Environment Testing (Formerly Hall Environmental Analysis Laboratory) 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. A summary of analytical data collected during this sampling event and historical sampling events is summarized in Table 2, with the full laboratory analytical report included as Appendix C.

Air sample data and measured flow rates are used to estimate total mass recovered and total emissions generated by the SVE system (Table 3). Based on these estimates, 8,312 pounds (4.2 tons) of TVPH have been removed by the system to date.

RECOMMENDATIONS

Based on the calculated mass removal rate from the fourth quarter 2023 vapor sampling event, the SVE system continues to remove approximately 4 pounds of TVPH per day, equivalent to approximately 1,460 pounds of TVPH per year. Although mass removal has remained asymptotic throughout 2023, the SVE system remains an effective remedy for remediating impacted soil at the site. Bi-weekly O&M visits 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) until it is determined that SVE is no longer effective, at which point a workplan for soil confirmation sampling will be submitted to the NMOCD for review and approval. Deviations from regular SVE system 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

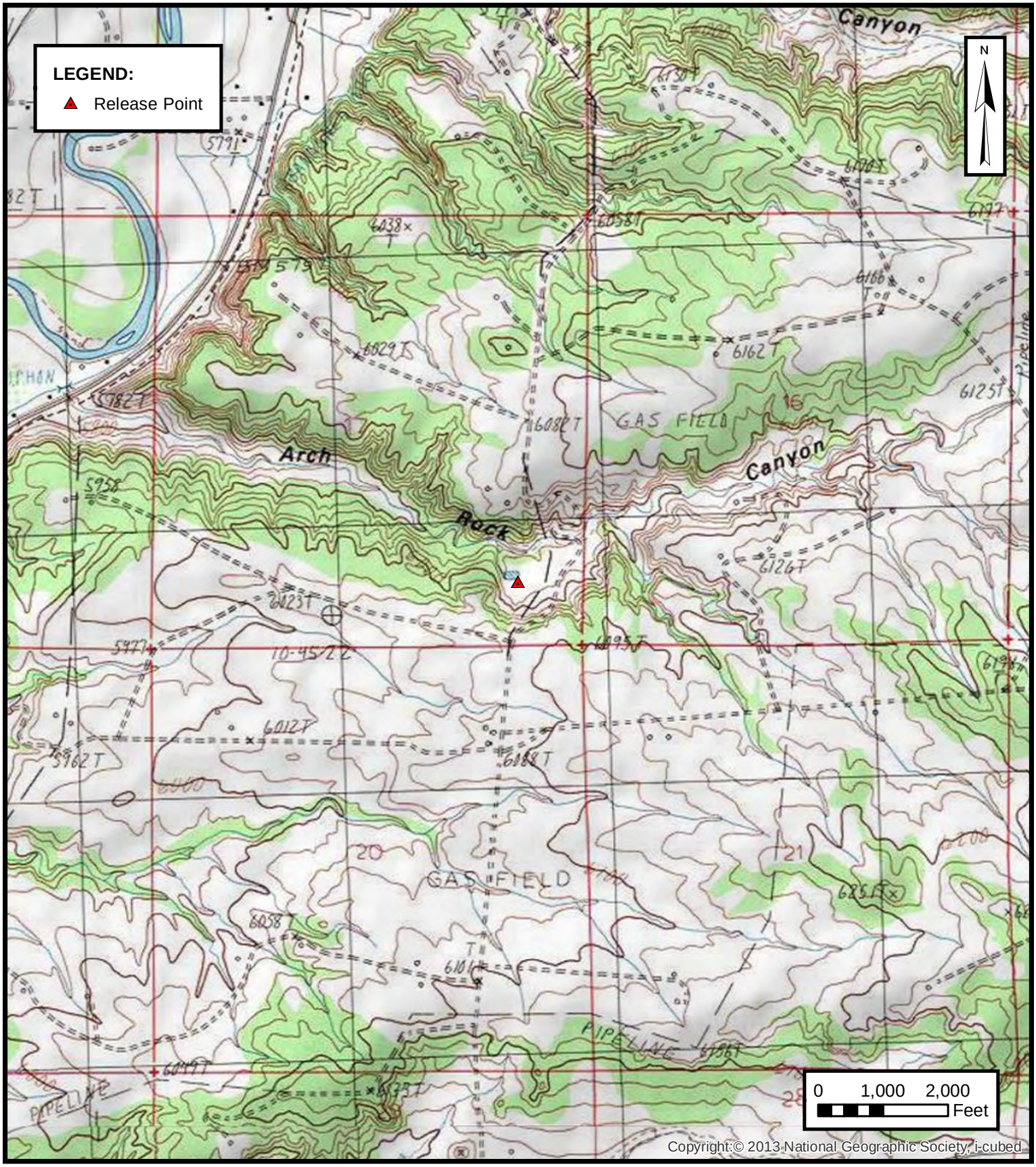
Stuart Hyde, LG
Senior Geologist
(970) 903-1607
shyde@ensolum.com

Daniel R. Moir, PG
Senior Managing Geologist
(303) 887-2946
dmoir@ensolum.com

Attachments:

ENSOLUM

FIGURES



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Environmental & Hydrogeologic Consultants

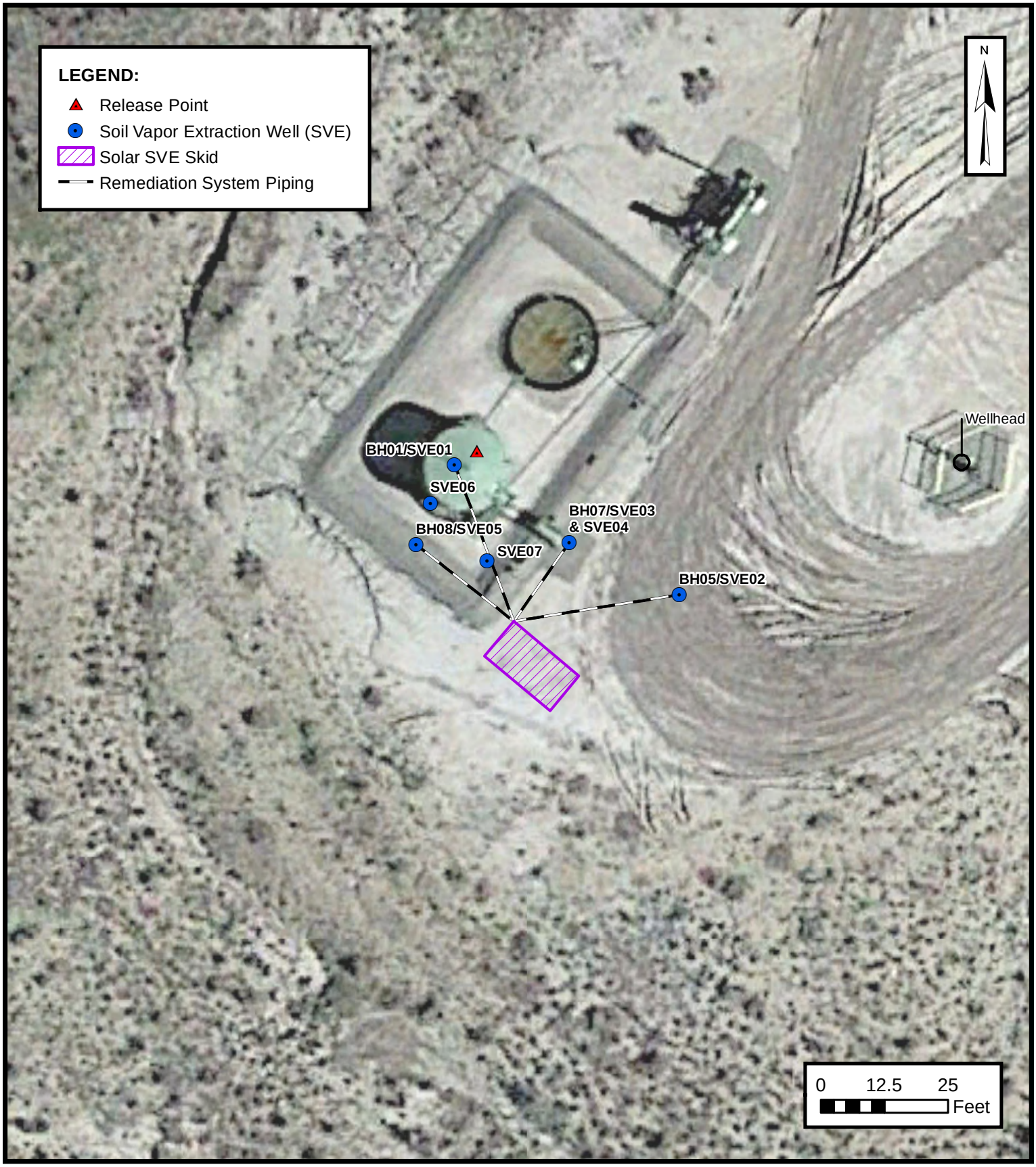
SITE LOCATION

HILCORP ENERGY COMPANY
SCOTT 4M
SESE SEC 17 T31N R1OW, San Juan County, New Mexico
36.893345° N, 107.899185° W

PROJECT NUMBER: 07A1988016

FIGURE

1



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Environmental & Hydrogeologic Consultants

SVE SYSTEM CONFIGURATION

HILCORP ENERGY COMPANY
SCOTT 4M
SESE SEC 17 T31N R1OW, San Juan County, New Mexico
36.893345° N, 107.899185° W

PROJECT NUMBER: 07A1988016

FIGURE
2

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TABLES

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TABLE 1
SOIL VAPOR EXTRACTION SYSTEM RUNTIME CALCULATIONS
Scott 4M
Hilcorp Energy Company
San Juan County, New Mexico

Date	Total Operational Hours	Delta Hours	Days	Percent Runtime
9/27/2023	15,052	--	--	--
12/20/2023	17,066	2,014.7	84.0	100%

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TABLE 2
SOIL VAPOR EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS
Scott 4M
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 (%)
2/1/2021	118	85	240	10	64	18,000	--	--
9/7/2021	53	40	280	24	240	15,000	--	--
9/29/2021	316	210	1,800	240	2,200	85,000	--	--
12/2/2021	232	48	320	32	310	50,000	16.60%	1.03%
3/15/2022	402	38	430	63	660	18,000	20.80%	0.473%
6/16/2022	89	1.3	13	1.6	17	750	21.57%	0.15%
9/28/2022	476	9.6	120	19	220	5,900	20.73%	0.90%
12/12/2022	198	2.5	26	4.9	59	2,100	21.65%	0.27%
3/9/2023	274	1.0	19	4.0	50	1,500	21.64%	0.19%
6/22/2023	247	1.2	16	2.4	34	940	21.42%	0.29%
8/23/2023	186	1.0	12	2.0	29	930	21.49%	0.32%
11/27/2023	129	0.86	11	1.5	22	860	21.40%	0.22%

Notes:

GRO: gasoline range organics
µg/L: microgram per liter
PID: photoionization detector
ppm: parts per million
TVPH: total volatile petroleum hydrocarbons
%: percent
--: not sampled

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TABLE 3
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS
Scott 4M
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)
2/1/2021	118	85	240	10	64	18,000
9/7/2021	53	40	280	24	240	15,000
9/29/2021	316	210	1,800	240	2,200	85,000
12/2/2021	232	48	320	32	310	50,000
3/15/2022	402	38	430	63	660	18,000
6/16/2022	89	1.3	13	1.6	17	750
9/28/2022 (1)	476	9.6	120	19	220	5,900
12/12/2022 (2)	198	2.5	26	4.9	59	2,100
3/9/2023	274	1.0	19	4.0	50	1,500
6/22/2023	247	1.2	16	2.4	34	940
8/23/2023	186	1.0	12	2.0	29	930
11/27/2023	129	0.86	11	1.5	22	860
Average	227	37	274	34	325	16,582

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)
2/1/2021	22	1,980	1,980	0.0070	0.020	0.00082	0.0053	1.5
9/7/2021	22	2,841,168	2,839,188	0.0051	0.021	0.0014	0.013	1.4
9/29/2021	10	2,979,528	138,360	0.0047	0.039	0.0049	0.046	1.9
12/2/2021	3.5	3,106,158	126,630	0.0017	0.014	0.0018	0.016	0.88
3/15/2022	8.0	3,519,486	413,328	0.0013	0.011	0.0014	0.015	1.0
6/16/2022	14	4,412,322	892,836	0.0010	0.012	0.0017	0.018	0.49
9/9/2022 (1)	12	5,218,146	805,824	0.00024	0.0030	0.00046	0.0053	0.15
12/10/2022 (2)	46	10,939,074	5,720,928	0.0010	0.013	0.0021	0.024	0.69
3/9/2023	31	14,846,376	3,907,302	0.00020	0.0026	0.00052	0.0063	0.21
6/22/2023 (3)	36	20,301,024	5,454,648	0.00015	0.0024	0.00043	0.0057	0.16
8/23/2023 (4)	38	23,648,084	3,347,060	0.00015	0.0020	0.00031	0.0044	0.13
11/27/2023	50	30,561,884	6,913,800	0.00017	0.0022	0.00033	0.0048	0.17
			Average	0.0019	0.012	0.0013	0.014	0.72

Mass Recovery

Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
2/1/2021	1.5	1.5	0.010	0.030	0.0012	0.0079	2.2	0.0011
9/7/2021	2,152	2,151	11	46	3.0	27	2,920	1.5
9/29/2021	2,383	231	1.1	9.0	1.1	11	431	0.22
12/2/2021	2,986	603	1.0	8.4	1.1	9.9	533	0.27
3/15/2022	3,847	861	1.1	9.7	1.2	12	876	0.44
6/16/2022	4,910	1,063	1.1	12.3	1.8	19	522	0.26
9/9/2022 (1)	6,029	1,119	0.3	3.3	0.5	6.0	167	0.08
12/10/2022 (2)	8,102	2,073	2.2	26	4.3	50	1,426	0.71
3/9/2023	10,203	2,101	0.43	5.5	1.1	13	438	0.22
6/22/2023	12,728	2,525	0.37	6.0	1.1	14	415	0.21
8/23/2023	14,209	1,481	0.23	2.9	0.46	6.6	195	0.10
11/27/2023	16,514	2,305	0.40	5.0	0.75	11	386	0.19
		Total Mass Recovery to Date	19	134	16	179	8,312	4.2

Notes:

(1): SVE system hours and flow rates were collected during operation and maintenance visit on 9/9/2022

(2): PID measurement, SVE system hours, and flow rates were collected during operation and maintenance visit on 12/10/2022

(3): SVE system rotameter was malfunctioning during site visit on 6/22/2023. Flow rate was estimated based on the average flow recorded during site visits between 4/13/2023 and 6/7/2023.

(4): SVE system rotameter was oscillating during third quarter 2023 site visits. Flow rate was estimated based on average historical flow for the current system

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

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APPENDIX A

Field Notes

SCOTT 4M SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 10-13 O&M PERSONNEL: B Sinclair
TIME ONSITE: TIME OFFSITE:

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: | KO TANK HIGH LEVEL

SVE SYSTEM	READING	TIME
Blower Hours **(take photo)**	15435.9	1519
Voltage In		
Amperage In		
Voltage Out		
Amperage Out		
KiloWatts		
KiloWatt-Hours		
Solar Controller Status		
~~Fe~~ K/O Vacuum (IWC)	-55	
Inlet Rotameter Flow (scfm)	50	
Inlet PID	194.2	
Exhaust PID	151.4	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		

TIMER SETTINGS	
Month	**Timer Setting**
January	8 AM to 7 PM
February	8 AM to 7 PM
March	8 AM to 8 PM
April	8 AM to 9 PM
May	7 AM to 9 PM
June	6 AM to 9 PM
July	6 AM to 9 PM
August	7 AM to 9 PM
September	8 AM to 9 PM
October	8 AM to 8 PM
November	9 AM to 8 PM
December	8 AM to 6 PM

SVE SYSTEM - QUARTERLY SAMPLING

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

Change in Well Operation:

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01		263.5	
SVE02		70	
SVE03		59.2	
SVE04		110	
SVE05		171.4	
SVE06 (OBSERVATION WELL)			
SVE07 (OBSERVATION WELL)			

COMMENTS/OTHER MAINTENANCE:

SCOTT 4M SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 10-30
TIME ONSITE:

O&M PERSONNEL: B Sinclair
TIME OFFSITE:

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: | KO TANK HIGH LEVEL

SVE SYSTEM	READING	TIME
Blower Hours **(take photo)**	15844.4	1543
Voltage In		
Amperage In		
Voltage Out		
Amperage Out		
KiloWatts		
KiloWatt-Hours		
Solar Controller Status		
Post ~~Pre~~ K/O Vacuum (IWC)	-58	
Inlet Rotameter Flow (scfm)	52	
Inlet PID	65	
Exhaust PID	151.4	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)	4.5	
Timer Setting		

TIMER SETTINGS	
Month	**Timer Setting**
January	8 AM to 7 PM
February	8 AM to 7 PM
March	8 AM to 8 PM
April	8 AM to 9 PM
May	7 AM to 9 PM
June	6 AM to 9 PM
July	6 AM to 9 PM
August	7 AM to 9 PM
September	8 AM to 9 PM
October	8 AM to 8 PM
November	9 AM to 8 PM
December	8 AM to 6 PM

SVE SYSTEM - QUARTERLY SAMPLING

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

Change in Well Operation:

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01		72.9	
SVE02		42.6	
SVE03		22.3	
SVE04		14.7	
SVE05		47.8	
SVE06 (OBSERVATION WELL)			
SVE07 (OBSERVATION WELL)			

COMMENTS/OTHER MAINTENANCE:

SCOTT 4M SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 11-13
TIME ONSITE:

O&M PERSONNEL: B Sinclair
TIME OFFSITE:

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

SVE SYSTEM	READING	TIME
Blower Hours **(take photo)**	16172.0	1123
Voltage In		
Amperage In		
Voltage Out		
Amperage Out		
KiloWatts		
KiloWatt-Hours		
Solar Controller Status		
Post ~~Pre~~ K/O Vacuum (IWC)	-58	
Inlet Rotameter Flow (scfm)	52	
Inlet PID	76.6	
Exhaust PID	137.3	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)	9	
Timer Setting		

TIMER SETTINGS	
Month	**Timer Setting**
January	8 AM to 7 PM
February	8 AM to 7 PM
March	8 AM to 8 PM
April	8 AM to 9 PM
May	7 AM to 9 PM
June	6 AM to 9 PM
July	6 AM to 9 PM
August	7 AM to 9 PM
September	8 AM to 9 PM
October	8 AM to 8 PM
November	9 AM to 8 PM
December	8 AM to 6 PM

SVE SYSTEM - QUARTERLY SAMPLING

SAMPLE ID: **SAMPLE TIME:**

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

OPERATING WELLS

Change in Well Operation:

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01		214.8	
SVE02		63.9	
SVE03		31.8	
SVE04		26.4	
SVE05		63.7	
SVE06 (OBSERVATION WELL)			
SVE07 (OBSERVATION WELL)			

COMMENTS/OTHER MAINTENANCE:

SCOTT 4M SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 11-27
TIME ONSITE:

O&M PERSONNEL: B Sinclair
TIME OFFSITE:

SVE SYSTEM - MONTHLY O&M

SVE ALARMS:	
	KO TANK HIGH LEVEL

SVE SYSTEM	READING	TIME
Blower Hours **(take photo)**	16513.6	1212
Voltage In		
Amperage In		
Voltage Out		
Amperage Out		
KiloWatts		
KiloWatt-Hours		
Solar Controller Status		
Post ~~Pre~~ K/O Vacuum (IWC)	-58	
Inlet Rotameter Flow (scfm)	50	
Inlet PID	128.8	
Exhaust PID	223.8	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)	12	
Timer Setting		

TIMER SETTINGS	
Month	**Timer Setting**
January	8 AM to 7 PM
February	8 AM to 7 PM
March	8 AM to 8 PM
April	8 AM to 9 PM
May	7 AM to 9 PM
June	6 AM to 9 PM
July	6 AM to 9 PM
August	7 AM to 9 PM
September	8 AM to 9 PM
October	8 AM to 8 PM
November	9 AM to 8 PM
December	8 AM to 6 PM

SVE SYSTEM - QUARTERLY SAMPLING

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

Change in Well Operation:

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01		275.9	
SVE02		59.3	
SVE03		63	
SVE04		54.1	
SVE05		144.1	
SVE06 (OBSERVATION WELL)			
SVE07 (OBSERVATION WELL)			

COMMENTS/OTHER MAINTENANCE:

SCOTT 4M SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 12-8
TIME ONSITE:

O&M PERSONNEL: B Sinclair
TIME OFFSITE:

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

SVE SYSTEM	READING	TIME
Blower Hours **(take photo)**	16776.9	1151
Voltage In		
Amperage In		
Voltage Out		
Amperage Out		
KiloWatts		
KiloWatt-Hours		
Solar Controller Status		
Post ~~Pre~~ K/O Vacuum (IWC)	-58	
Inlet Rotameter Flow (scfm)	48	
Inlet PID	84.2	
Exhaust PID	145.7	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		

TIMER SETTINGS	
Month	**Timer Setting**
January	8 AM to 7 PM
February	8 AM to 7 PM
March	8 AM to 8 PM
April	8 AM to 9 PM
May	7 AM to 9 PM
June	6 AM to 9 PM
July	6 AM to 9 PM
August	7 AM to 9 PM
September	8 AM to 9 PM
October	8 AM to 8 PM
November	9 AM to 8 PM
December	8 AM to 6 PM

SVE SYSTEM - QUARTERLY SAMPLING

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

Change in Well Operation:

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01		290.8	
SVE02		63.5	
SVE03		46.7	
SVE04		10.7	
SVE05		79.6	
SVE06 (OBSERVATION WELL)			
SVE07 (OBSERVATION WELL)			

COMMENTS/OTHER MAINTENANCE:

SCOTT 4M SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 12-20 O&M PERSONNEL: B Sinclair
TIME ONSITE: _____ TIME OFFSITE: _____

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: | KO TANK HIGH LEVEL

SVE SYSTEM	READING	TIME
Blower Hours **(take photo)**	17066.4	1325
Voltage In		
Amperage In		
Voltage Out		
Amperage Out		
KiloWatts		
KiloWatt-Hours		
Solar Controller Status		
Post ~~Pre~~ K/O Vacuum (IWC)	-60	
Inlet Rotameter Flow (scfm)	37	
Inlet PID	106.4	
Exhaust PID	162.4	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)	5.5	
Timer Setting		

TIMER SETTINGS	
Month	**Timer Setting**
January	8 AM to 7 PM
February	8 AM to 7 PM
March	8 AM to 8 PM
April	8 AM to 9 PM
May	7 AM to 9 PM
June	6 AM to 9 PM
July	6 AM to 9 PM
August	7 AM to 9 PM
September	8 AM to 9 PM
October	8 AM to 8 PM
November	9 AM to 8 PM
December	8 AM to 6 PM

SVE SYSTEM - QUARTERLY SAMPLING

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

Change in Well Operation:

LOCATION	VACUUM (IWC)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01		240.2	
SVE02		19.6	
SVE03		59.3	
SVE04		26.2	
SVE05		101.6	
SVE06 (OBSERVATION WELL)			
SVE07 (OBSERVATION WELL)			

COMMENTS/OTHER MAINTENANCE:

ENSOLUM

APPENDIX B

Project Photographs

PROJECT PHOTOGRAPHS
Scott 4M
San Juan County, New Mexico
Hilcorp Energy Company

Photograph 1 Runtime meter taken on September 27, 2023 at 3:08 PM Hours = 15,051.7		
Photograph 2 Runtime meter taken on December 20, 2023 at 1:25 PM Hours = 17,066.4		

Ensolum, LLC | Environmental & Hydrogeologic Consultants
Durango, Colorado | info@ensolum.com

ENSOLUM

APPENDIX C

Laboratory Analytical Reports

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 12, 2023

Mitch Killough
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX:

RE: Scott 4M OrderNo.: 2311C50

Dear Mitch Killough:

Eurofins Environment Testing South Central, LLC received 1 sample(s) on 11/28/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2311C50**
Date Reported: **12/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: SVE-1
Project: Scott 4M
Collection Date: 11/27/2023 12:40:00 PM
Lab ID: 2311C50-001 **Matrix:** AIR
Received Date: 11/28/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**
Gasoline Range Organics (GRO)	860	25		µg/L	5	12/7/2023 1:30:49 PM
Surr: BFB	538	15-412	S	%Rec	5	12/7/2023 1:30:49 PM
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**
Benzene	0.86	0.50		µg/L	5	12/6/2023 2:32:00 PM
Toluene	11	0.50		µg/L	5	12/6/2023 2:32:00 PM
Ethylbenzene	1.5	0.50		µg/L	5	12/6/2023 2:32:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,2,4-Trimethylbenzene	1.9	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,3,5-Trimethylbenzene	2.3	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,2-Dichloroethane (EDC)	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,2-Dibromoethane (EDB)	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Naphthalene	ND	1.0		µg/L	5	12/6/2023 2:32:00 PM
1-Methylnaphthalene	ND	2.0		µg/L	5	12/6/2023 2:32:00 PM
2-Methylnaphthalene	ND	2.0		µg/L	5	12/6/2023 2:32:00 PM
Acetone	ND	5.0		µg/L	5	12/6/2023 2:32:00 PM
Bromobenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Bromodichloromethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Bromoform	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Bromomethane	ND	1.0		µg/L	5	12/6/2023 2:32:00 PM
2-Butanone	ND	5.0		µg/L	5	12/6/2023 2:32:00 PM
Carbon disulfide	ND	5.0		µg/L	5	12/6/2023 2:32:00 PM
Carbon tetrachloride	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Chlorobenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Chloroethane	ND	1.0		µg/L	5	12/6/2023 2:32:00 PM
Chloroform	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Chloromethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
2-Chlorotoluene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
4-Chlorotoluene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
cis-1,2-DCE	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
cis-1,3-Dichloropropene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,2-Dibromo-3-chloropropane	ND	1.0		µg/L	5	12/6/2023 2:32:00 PM
Dibromochloromethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Dibromomethane	ND	1.0		µg/L	5	12/6/2023 2:32:00 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Dichlorodifluoromethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,1-Dichloroethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,1-Dichloroethene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2311C50**
Date Reported: **12/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: SVE-1
Project: Scott 4M
Collection Date: 11/27/2023 12:40:00 PM
Lab ID: 2311C50-001 **Matrix:** AIR **Received Date:** 11/28/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**
1,2-Dichloropropane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,3-Dichloropropane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
2,2-Dichloropropane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,1-Dichloropropene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Hexachlorobutadiene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
2-Hexanone	ND	5.0		µg/L	5	12/6/2023 2:32:00 PM
Isopropylbenzene	0.61	0.50		µg/L	5	12/6/2023 2:32:00 PM
4-Isopropyltoluene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
4-Methyl-2-pentanone	ND	5.0		µg/L	5	12/6/2023 2:32:00 PM
Methylene chloride	ND	1.5		µg/L	5	12/6/2023 2:32:00 PM
n-Butylbenzene	ND	1.5		µg/L	5	12/6/2023 2:32:00 PM
n-Propylbenzene	0.57	0.50		µg/L	5	12/6/2023 2:32:00 PM
sec-Butylbenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Styrene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
tert-Butylbenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Tetrachloroethene (PCE)	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
trans-1,2-DCE	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
trans-1,3-Dichloropropene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Trichloroethene (TCE)	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Trichlorofluoromethane	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	5	12/6/2023 2:32:00 PM
Vinyl chloride	ND	0.50		µg/L	5	12/6/2023 2:32:00 PM
Xylenes, Total	22	0.75		µg/L	5	12/6/2023 2:32:00 PM
Surr: Dibromofluoromethane	93.4	70-130		%Rec	5	12/6/2023 2:32:00 PM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%Rec	5	12/6/2023 2:32:00 PM
Surr: Toluene-d8	119	70-130		%Rec	5	12/6/2023 2:32:00 PM
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	5	12/6/2023 2:32:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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ANALYTICAL SUMMARY REPORT

December 11, 2023

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

Work Order: B23111914 Quote ID: B15626

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 11/29/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B23111914-001	2311C50-001B, SVE-1	11/27/23 12:40	11/29/23	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 S 27th St., 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.

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

Report Approved By:

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B23111914-001
Client Sample ID: 2311C50-001B, SVE-1

Report Date: 12/11/23
Collection Date: 11/27/23 12:40
DateReceived: 11/29/23
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.40	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Nitrogen	77.69	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Carbon Dioxide	0.22	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Methane	0.66	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Ethane	0.03	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-95	12/05/23 11:07 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-95	12/05/23 11:07 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	7			1		GPA 2261-95	12/05/23 11:07 / jrj
Net BTU per cu ft @ std cond. (LHV)	7			1		GPA 2261-95	12/05/23 11:07 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-95	12/05/23 11:07 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	12/05/23 11:07 / jrj
Specific Gravity @ 60/60F	0.996			0.001		D3588-81	12/05/23 11:07 / jrj
Air, %	97.76			0.01		GPA 2261-95	12/05/23 11:07 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	12/05/23 11:07 / jrj

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

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

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** B23111914 **Report Date:** 12/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: GPA 2261-95										Batch: R413284
Lab ID: LCS120523	11	Laboratory Control Sample				Run: GCNGA-B_231205A				12/05/23 03:02
Oxygen		0.64	Mol %	0.01	128	70	130			
Nitrogen		6.32	Mol %	0.01	105	70	130			
Carbon Dioxide		1.02	Mol %	0.01	103	70	130			
Methane		74.5	Mol %	0.01	100	70	130			
Ethane		6.01	Mol %	0.01	100	70	130			
Propane		4.98	Mol %	0.01	101	70	130			
Isobutane		1.82	Mol %	0.01	91	70	130			
n-Butane		1.97	Mol %	0.01	98	70	130			
Isopentane		0.98	Mol %	0.01	98	70	130			
n-Pentane		0.97	Mol %	0.01	97	70	130			
Hexanes plus		0.77	Mol %	0.01	96	70	130			
Lab ID: B23111914-001ADUP	12	Sample Duplicate				Run: GCNGA-B_231205A				12/05/23 12:00
Oxygen		21.4	Mol %	0.01				0.2	20	
Nitrogen		77.6	Mol %	0.01				0.1	20	
Carbon Dioxide		0.22	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		0.79	Mol %	0.01				18	20	
Ethane		0.03	Mol %	0.01				0.0	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					20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

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Work Order Receipt Checklist

Hall Environmental

B23111914

Login completed by: Danielle N. Harris
Date Received: 11/29/2023
Reviewed by: lleprowse
Received by: cmj
Reviewed Date: 12/1/2023
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	9.2°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

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

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

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

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

Contact and Corrective Action Comments:

None

eurofins | Environment Testing

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

B23119114

SUB CONTRATOR:	Energy Labs -Billings	COMPANY:	Energy Laboratories	PHONE:	(406) 869-6253
ADDRESS:	1120 South 27th Street			ACCOUNT #:	
CITY, STATE, ZIP:	Billings, MT 59107				

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS	
1	2311C50-001B	SVE-1	TEDLAR	Air	11/27/2023 12:40:00 PM	1	Natural Gas Analysis O2+CO2	

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 11/28/2023	Time: 9:33 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: Crystal Jones	Date: 11/29/23	Time: 0935

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples °C Attempt to Cool ?
Comments:

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2311C50 RcptNo: 1

Received By: Tracy Casarrubias 11/28/2023 6:45:00 AM

Completed By: Tracy Casarrubias 11/28/2023 9:31:55 AM

Reviewed By: TMC 11/28/23

Chain of Custody

1. Is Chain of Custody complete?	Yes ☐	No ☑	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☐	No ☐	NA ☑
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted?

Checked by SCM 11/28/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions: Mailing address and phone number are missing on COC - TMC 11/28/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	N/A	Good	Yes			

Chain-of-Custody Record

Client: Hilcorp

Mailing Address:

Phone #:

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

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Scott 4M

Project #:

Project Manager: Mitch Killough

Sampler: Brandon Sinclair

On Ice: ☐ Yes ☑ No

# of Coolers: 1

Cooler Temp(including CF): N/A (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2311C50	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	8015 TVPH	Fixed gas O_2 & CO_2
11-27	1240	air	SVF-1	2 Tedlar		001								✓			✓	✓

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-27	1634				11/27/23	1634
11/27/23	1800			Via: courier	11/28/23	6:45

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.

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

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

CONDITIONS

Action 302578

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	372171
	Action Number: 302578
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Received for the Record: Content Satisfactory 1. Continue to conduct O&M as scheduled 2. Submit next report as scheduled, annually or biannually.	4/2/2024