ENSOLUM

April 15, 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: First Quarter 2024 – Solar SVE System Update
Bell Federal GC B#1
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: NCS1729355513

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *First Quarter 2024 – Solar SVE System Update* report summarizing the solar soil vapor extraction (SVE) system performance at the Bell Federal GC B#1 natural gas production well (Site), located in Section 11, Township 30 North, Range 13 West in San Juan County, New Mexico (Figure 1). The SVE system has operated since January 16, 2018, to remediate subsurface soil impacts originating from a release of approximately 58 barrels (bbls) of natural gas condensate caused by an act of vandalism. This report summarizes Site activities performed in January, February, and March of 2024 to the New Mexico Oil Conservation Division (NMOCD).

SVE SYSTEM SPECIFICATIONS

Currently, a solar SVE system is operating at the Site, which consists of a 1/3-horsepower blower capable of producing 22 cubic feet per minute (cfm) flow at a vacuum of 29 inches of water column (IWC); three solar panels, with a total of 915 watts of maximum power output; and charged by four 12-volt deep cycle batteries that subsequently power the SVE blower. The system operation is controlled by a timer adjusted throughout the year based on available nominal daylight hours (generally nine hours per day during the winter and 14 hours per day during the summer). Four SVE wells (SVE01 through SVE04) are currently present at the Site as depicted on Figure 2.

FIRST QUARTER 2024 ACTIVITIES

During the first quarter of 2024, Ensolum and Hilcorp personnel performed bi-weekly operation and maintenance (O&M) visits to verify the system was operating as designed and to perform any required maintenance. During Site visits, the system timer and the angle of the solar panels were adjusted to account for seasonal variations and maximize system efficiency. Field notes collected during O&M visits are presented in Appendix A.

During the first quarter of 2024, SVE wells SVE02, SVE03, and SVE04 were operated to induce air flow in the impacted zones at the Site. Between December 27, 2023, and March 26, 2024, approximately 931 total hours of nominal daylight were available for the solar SVE system to operate. Available nominal daylight hours are based on estimates by the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS) for the Site location. Between these dates, the actual runtime

for the system was 768.7 hours, equating to a first quarter 2024 runtime efficiency of 82.6 percent (%). Table 1 presents the SVE system runtime compared to nominal available daylight hours per month. Based on the estimated available runtime hours for the month of January and February, the SVE system calculated runtime percentage would be approximately 83% between December 27, 2023, and February 12, 2024; however, no alarms aside from the routine daily "OFF" alarms, which notify personnel that the system has shut down due to lack of available battery power at the end of each day, were noted during that time period and the system was on upon arrival for each O&M visit. Therefore, the drop in estimated runtime can likely be attributed to cloudy weather leading to a lower number of hours of nominal daylight than what is presented above and not a drop in system performance. On March 26, 2024, the SVE system was found to be off upon arrival. No alarms were noted on the control panel. The inverter was restarted and the system resumed operation without issue. Equipment will continue to be monitored into the second quarter of 2024 to verify equipment repairs or replacement are not required. Appendix B presents photographs of the runtime meter for calculating the first quarter runtime efficiency.

A first quarter 2024 vapor sample was collected on March 7, 2024, from a sample port located between the SVE piping manifold and the SVE blower using a high vacuum air sampler. Prior to collection, the vapor sample was field screened with a photoionization detector (PID) for organic vapor monitoring (OVM). The vapor sample was collected directly into two 1-Liter Tedlar® bags and analyzed by Hall Environmental Analysis Laboratory for analysis of total volatile petroleum hydrocarbons (TVPH – also known as total petroleum hydrocarbons – gasoline range organics (TPH-GRO)) via United States Environmental Protection Agency (EPA) Method 8015D and volatile organic compounds (VOCs) following EPA Method 8260B, as well as fixed gas analysis of oxygen and carbon dioxide following American Society for Testing and Materials (ASTM) Method D-1946. Table 2 presents a summary of analytical data collected during this sampling event and historical sampling events, with the full laboratory analytical report included in Appendix C.

Vapor sample data and measured stack flow rates are used to estimate total mass recovered and total emissions generated by the SVE system (Table 3). Based on these estimates, 48,852 pounds (24 tons) of TVPH have been removed by the system to date. Approximately 1.75 gallons of phase-separated hydrocarbons were removed from the SVE wells during the O&M and sampling period described above.

RECOMMENDATIONS

Bi-weekly O&M visits will continue to be performed by Ensolum and/or Hilcorp personnel to verify the SVE system is operating within normal working ranges (i.e., temperature, pressure, and vacuum). Deviations from regular operations will be noted on field logs and included in the following quarterly report. Hilcorp will continue operating the SVE system until asymptotic conditions are observed. At that time, an evaluation of residual petroleum hydrocarbons will be assessed and further recommendations for remedial actions, if any, will be provided to NMOCD.

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

Sincerely,
Ensolum, LLC

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Attachments:

Figure 1	Site Location
Figure 2	SVE System Configuration
Table 1	Soil Vapor Extraction System Runtime Calculations
Table 2	Soil Vapor Extraction System Emissions Analytical Results
Table 3	Soil Vapor Extraction System Mass Removal and Emissions
Appendix A	Field Notes
Appendix B	Project Photographs
Appendix C	Laboratory Analytical Reports

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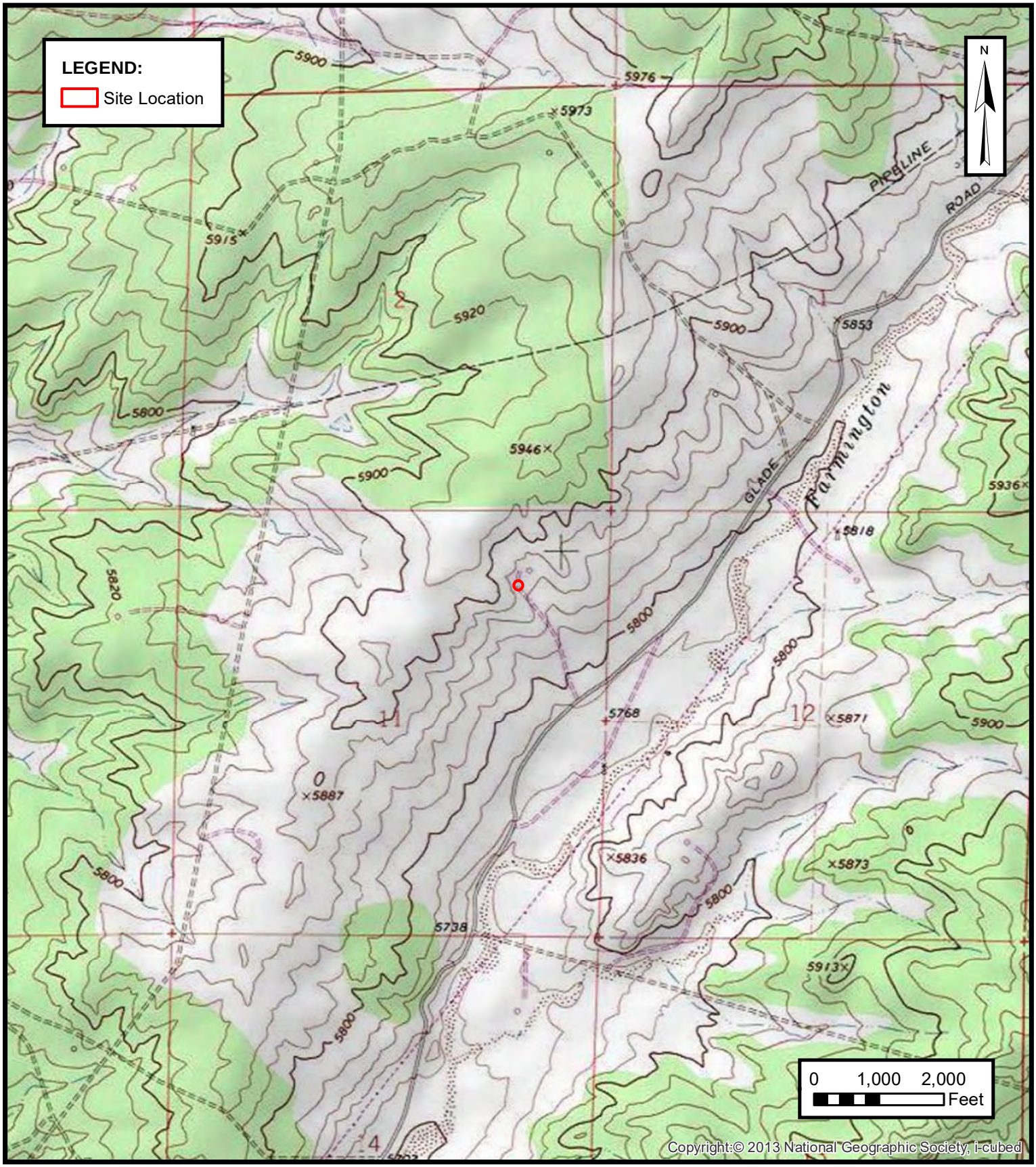
Figures



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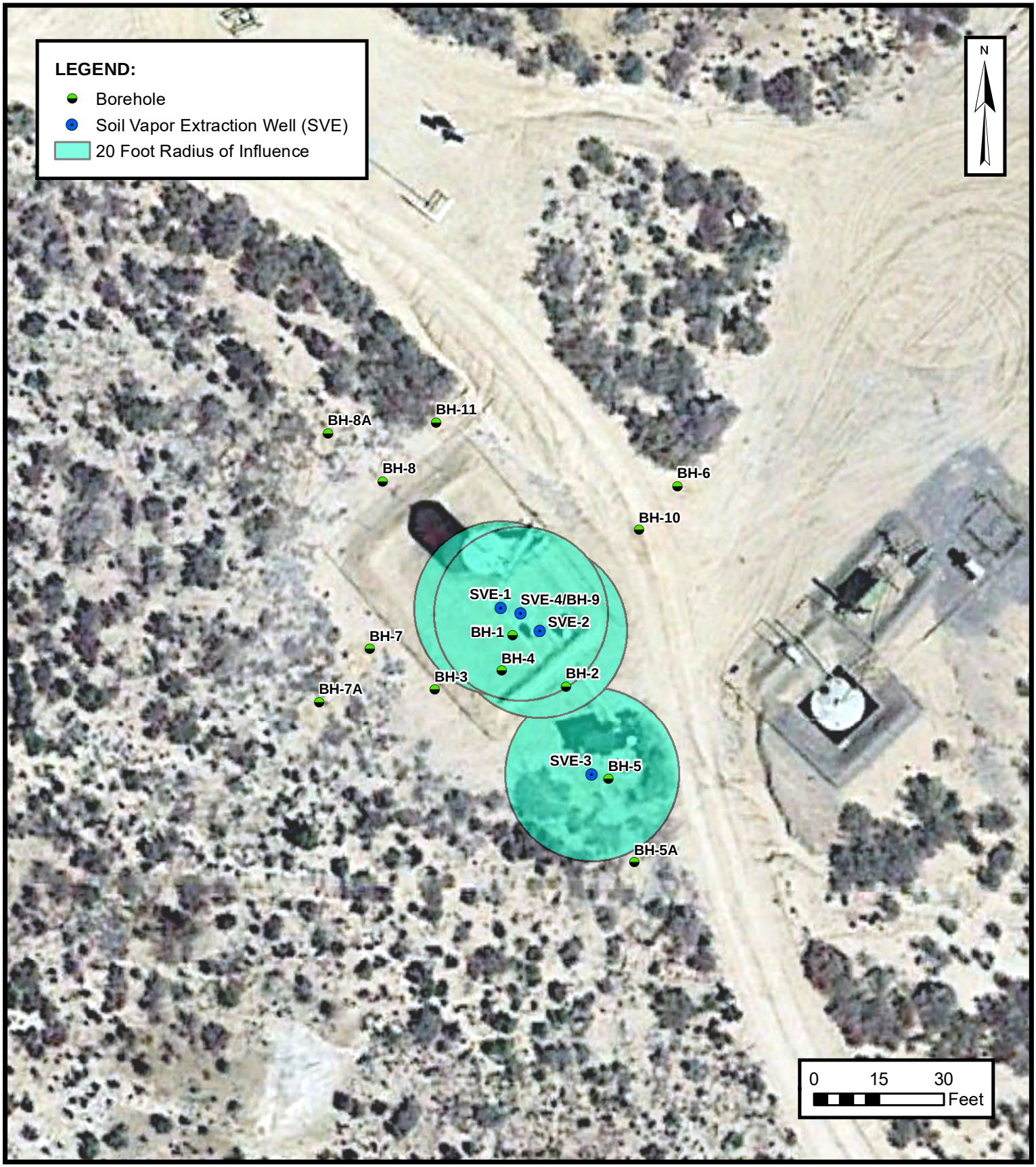
Environmental & Hydrogeologic Consultants

SITE LOCATION

HILCORP ENERGY COMPANY
BELL FEDERAL GC B#1
San Juan County, New Mexico
36.832426° N, 108.167760° W

PROJECT NUMBER: 07A1988001

FIGURE
1



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Environmental & Hydrogeologic Consultants

SVE SYSTEM CONFIGURATION

HILCORP ENERGY COMPANY
BELL FEDERAL GC B#1
San Juan County, New Mexico
36.832426° N, 108.167760° W

PROJECT NUMBER: 07A1988001

FIGURE
2

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Tables

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TABLE 1
SOIL VAPOR EXTRACTION SYSTEM RUNTIME CALCULATIONS
Bell Federal GC B#1
Hilcorp Energy Company
San Juan County, New Mexico

Date	Total Operational Hours	Delta Hours
12/27/2023	23,100.1	---
3/26/2024	23,868.8	768.7

Time Period	December 27 to December 31, 2023	January 1 to January 31, 2024	February 1 to February 29, 2024	March 1 to March 26, 2024
Days	5	31	29	26
Avg. Nominal Daylight Hours	9	10	10	11
Available Runtime Hours	45	310	290	286

Quarterly Available Daylight Runtime Hours	**931**
Quarterly Runtime Hours	**768.7**
Quarterly % Runtime	**82.6%**

Month	Days	Nominal Daylight Hours	Total Month Hours
January	31	10	310
February	28	10	280
March	31	11	341
April	30	12	360
May	31	13	403
June	30	14	420
July	31	14	434
August	31	13	403
September	30	12	360
October	31	11	341
November	30	10	300
December	31	9	279

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TABLE 2
SOIL VAPOR EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS
Bell Federal GC B#1
Hilcorp Energy Company
San Juan County, New Mexico

Date	Inlet PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH/GRO (µg/L)	Oxygen (%)	Carbon Dioxide (%)
1/24/2018	1,435	280	200	<5.0	38.0	30,000	--	--
8/17/2018	1,873	160	380	21.0	320	18,000	--	--
3/22/2019	1,607	490	920	24.0	480	NA	--	--
6/18/2019	1,026	72.0	270	27.0	290	NA	--	--
9/25/2019	1,762	220	480	21.0	440	35,000	--	--
12/16/2019	1,902	130	840	21.0	220	22,000	--	--
3/10/2020	1,171	120	380	19.0	330	31,000	--	--
6/25/2020	978.0	180	430	25.0	480	45,000	--	--
9/16/2020	1,766	186	433	18.0	497	32,100	18.2%	3.29%
12/8/2020	1,741	114	292	10.6	324	16,000	17.3%	4.45%
3/23/2021	1,252	45	86.3	2.3	95.4	7,930	20.2%	<0.500%
6/10/2021	165.8	8.5	20	<0.50	20.0	5,700	17.3%	2.21%
9/8/2021	NM	130	240	5.9	150	33,000	--	--
12/15/2021	1,374	95	160	11.0	220	24,098	16.32%	3.32%
3/16/2022	1,096	53	120	<0.50	82	26,000	16.80%	3.01%
6/16/2022	708	24	69	<5.0	38	13,000	21.01%	0.82%
9/8/2022	545	50.2	129	4.99	612	10,500	17.70%	2.80%
12/7/2022	675	52	74	<5.00	35	13,000	16.98%	3.68%
3/9/2023	1,285	54	120	<2.5	54	15,000	16.88%	4.03%
6/23/2023	1,109	27	55	<2.5	38	13,000	17.03%	3.63%
8/24/2023	1,290	25	60	<5.0	38	9,600	16.74%	3.62%
11/20/2023	739.8	35	83	<2.5	40	9,500	18.18%	2.89%
3/7/2024	486.8	18	44	<5.0	21	4,800	17.63%	2.28%

Notes:

GRO: gasoline range hydrocarbons
µg/L: microgram per liter
PID: photoionization detector
ppm: parts per million
TVPH: total volatile petroleum hydrocarbons
%: percent
--: not sampled
<: gray indicates result less than the stated laboratory reporting limit (RL)

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TABLE 3
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS
Bell Federal GC B#1
Hilcorp Energy Company
San Juan County, New Mexico

Laboratory Analysis

Date	Inlet PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH (µg/L)
1/24/2018	1,435	280	200	*5.0*	38	30,000
8/17/2018	1,873	160	380	21	320	18,000
3/22/2019	1,607	490	920	24	480	--
6/18/2019	1,026	72	270	27	290	--
9/25/2019	1,762	220	480	21	440	35,000
12/16/2019	1,902	130	840	21	220	22,000
3/10/2020	1,171	120	380	19	330	31,000
6/25/2020	978	180	430	25	480	45,000
9/16/2020	1,766	186	433	18	497	32,100
12/8/2020	1,741	114	292	11	324	16,000
3/23/2021	1,252	45	86	2	95	7,930
6/10/2021	166	9	20	*0.50*	20	5,700
9/8/2021	--	130	240	6	150	33,000
12/15/2021	1,374	95	160	11	220	24,098
3/16/2022	1,096	53	120	*0.50*	82	26,000
6/16/2022	708	24	69	*5.0*	38	13,000
9/8/2022	545	50	129	4.99	612	10,500
12/7/2022	675	52	74	*5.0*	35	13,000
3/9/2023	1,285	54	120	*2.5*	54	15,000
6/23/2023	1,109	27	55	*2.5*	38	13,000
8/24/2023	1,290	25	60	*5.0*	38	9,600
11/20/2023	740	35	83	*2.5*	40	9,500
3/7/2024	487	18	44	*5.0*	21	4,800
Average	1,181	112	256	11	211	19,725

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)
1/24/2018	40	164,400	164,400	0.042	0.030	0.001	0.0057	4.5
8/17/2018	33	5,240,130	5,075,730	0.027	0.036	0.0016	0.022	3.0
3/22/2019	32	9,176,130	3,936,000	0.039	0.078	0.0027	0.048	--
6/18/2019	32	11,096,130	1,920,000	0.034	0.071	0.0031	0.046	--
9/25/2019	33	13,610,730	2,514,600	0.018	0.046	0.0030	0.045	3.3
12/16/2019	32	15,513,450	1,902,720	0.021	0.079	0.0025	0.039	3.4
3/10/2020	29	17,246,490	1,733,040	0.014	0.066	0.0022	0.030	2.9
6/25/2020	29	19,123,950	1,877,460	0.016	0.044	0.0024	0.044	4.1
9/16/2020	31	20,825,850	1,701,900	0.021	0.050	0.0025	0.057	4.5
12/8/2020	30	22,049,850	1,224,000	0.017	0.041	0.0016	0.046	2.7
3/23/2021	30	23,122,650	1,072,800	0.0089	0.021	0.00073	0.024	1.3
6/10/2021	33	23,514,690	392,040	0.0033	0.0066	0.00017	0.0071	0.84
9/8/2021	33	23,831,490	316,800	0.0085	0.0160	0.00039	0.010	2.4
12/15/2021	33	26,136,210	2,304,720	0.014	0.025	0.0010	0.023	3.5
3/16/2022	33	27,701,202	1,564,992	0.0091	0.017	0.00071	0.019	3.1
6/16/2022	25	29,520,102	1,818,900	0.0036	0.009	0.00026	0.0056	1.8
9/8/2022	31	31,835,244	2,315,142	0.0043	0.011	0.00058	0.038	1.4
12/7/2022	29	34,162,320	2,327,076	0.0055	0.011	0.00054	0.035	1.3
3/9/2023	29	36,239,184	2,076,864	0.0057	0.011	0.00041	0.0048	1.5
6/23/2023	29	38,718,336	2,479,152	0.0044	0.0095	0.00027	0.0050	1.5
8/24/2023	29	40,107,552	1,389,216	0.0028	0.0062	0.0004	0.0041	1.2
11/20/2023	28	41,872,560	1,765,008	0.0031	0.0075	0.0004	0.0041	1.0
3/7/2024	27	43,380,942	1,508,382	0.0027	0.0064	0.0004	0.0031	0.72
			Average	0.014	0.030	0.001	0.025	2.4

Mass Recovery

Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
1/24/2018	69	69	2.9	2.0	0.051	0.39	307	0.15
8/17/2018	2,632	2,564	70	92	4.1	57	7,593	3.8
3/22/2019	4,682	2,050	80	159	5.5	98	--	--
6/18/2019	5,682	1,000	33.6	71	3.1	46	--	--
9/25/2019	6,952	1,270	23	59	3.8	57	4,154	2.1
12/16/2019	7,943	991	21	78	2.5	39	3,380	1.7
3/10/2020	8,939	996	14	66	2.2	30	2,863	1.4
6/25/2020	10,018	1,079	18	47	2.6	47	4,447	2.2
9/16/2020	10,933	915	19	46	2.3	52	4,090	2.0
12/8/2020	11,613	680	11.4	28	1.1	31	1,835	0.92
3/23/2021	12,209	596	5.3	12.6	0.43	14.0	800	0.40
6/10/2021	12,407	198	0.66	1.30	0.035	1.41	167	0.083
9/8/2021	12,567	160	1.4	2.6	0.06	1.7	382	0.19
12/15/2021	13,731	1,164	16	29	1.2	27	4,101	2.1
3/16/2022	14,521	790	7.2	14	0.561	14.7	2,444	1.2
6/16/2022	15,734	1,213	4.4	11	0.31	6.8	2,211	1.1
9/8/2022	16,979	1,245	5.4	14	0.72	46.9	1,696	0.8
12/7/2022	18,316	1,337	7.4	15	0.72	46.9	1,704	0.9
3/9/2023	19,510	1,194	6.9	13	0.49	5.8	1,812	0.9
6/23/2023	20,935	1,425	6.3	14	0.39	7.1	2,164	1.1
8/24/2023	21,733	798	2.3	5.0	0.32	3.3	979	0.49
11/20/2023	22,784	1,051	3.3	7.9	0.41	4.3	1,051	0.53
3/7/2024	23,715	931	2.5	6.0	0.35	2.9	672	0.34
		Total Mass Recovery to Date	360	792	33	640	48,852	24

Notes:

cf: cubic feet
cfm: cubic feet per minute
µg/L: micrograms per liter
lb/hr: pounds per hour
--: not sampled
PID: photoionization detector
ppm: parts per million
TVPH: total volatile petroleum hydrocarbons
gray: laboratory reporting limit used for calculating emissions

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APPENDIX A

Field Notes

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BELL FEDERAL GC B1 SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 1-9
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)**	23206.5	1525
Pre K/O Vacuum (IWC)	22	
Thermal Anemometer Flow (fpm)	755.2	
Thermal Anemometer Temp (C)	11.25	
Inlet PID	401.8	
Exhaust PID	1030	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		
Heat Trace (on/off)		

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			
SVE02			
SVE03		1862	
SVE04		*	

PRODUCT RECOVERY

LOCATION	DEPTH TO PRODUCT	DEPTH TO WATER	ECOVERED VOLUM	COMMENTS
SVE-1				
SVE-2RS				
SVE-4				
SVE-11S				
SVE-13S				
SVE-14S				

COMMENTS/OTHER MAINTENANCE:

Bailed 1g of LNAPL from SVE-3
*No pressure in line, possibly frozen

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BELL FEDERAL GC B1 SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 1-31
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)	23372.5	1238
Pre K/O Vacuum (IWC)	21	
Thermal Anemometer Flow (fpm)	794.3	
Thermal Anemometer Temp (C)	24.55	
Inlet PID	498.2	
Exhaust PID	1132	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		
Heat Trace (on/off)		

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			
SVE02			
SVE03		757.1	
SVE04		16.59	

RODUCT RECOVERY

LOCATION	DEPTH TO PRODUCT	DEPTH TO WATER	ECOVERED VOLUM	COMMENTS
SVE-1				
SVE-2RS				
SVE-4				
SVE-11S				
SVE-13S				
SVE-14S				

OMMENTS/OTHER MAINTENANCE:

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BELL FEDERAL GC B1 SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 2-12
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)	23463.2	1215
Pre K/O Vacuum (IWC)	21	
Thermal Anemometer Flow (fpm)	1215	
Thermal Anemometer Temp (C)	12.25	
Inlet PID	1502	
Exhaust PID	1910	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		
Heat Trace (on/off)		

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			
SVE02			
SVE03		1431	
SVE04		723.5	

PRODUCT RECOVERY

LOCATION	DEPTH TO PRODUCT	DEPTH TO WATER	ECOVERED VOLUM	COMMENTS
SVE-1				
SVE-2RS				
SVE-4				
SVE-11S				
SVE-13S				
SVE-14S				

COMMENTS/OTHER MAINTENANCE:

Drained 0.75g of LNAPL from MW-3.

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BELL FEDERAL GC B1 SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 2-23
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)**	23576.8	1227
Pre K/O Vacuum (IWC)	21	
Thermal Anemometer Velocity (fpm)	906.3	
Thermal Anemometer Temp (C)	19.85	
Inlet PID	1136	
Exhaust PID	1210	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		
Heat Trace (on/off)		

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)	VELOCITY (fpm)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01				
SVE02				
SVE03	21.6		1037	
SVE04	21.5		1811	

PRODUCT RECOVERY

LOCATION	DEPTH TO PRODUCT	DEPTH TO WATER	RECOVERED VOLUME	COMMENTS
SVE-1				
SVE-2RS				
SVE-4				
SVE-11S				
SVE-13S				
SVE-14S				

COMMENTS/OTHER MAINTENANCE:

Released to Imaging: 4/25/2024 2:00:50 PM

BELL FEDERAL GC B1 SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 3/5/24 O&M PERSONNEL: E. carroll
TIME ONSITE: 1130 TIME OFFSITE: 1250

SVE SYSTEM - MONTHLY O&M

SVE ALARMS: KO TANK HIGH LEVEL

SVE SYSTEM	READING	TIME
Blower Hours (take photo)	736855	11:42
Pre K/O Vacuum (IWC)	20	
Thermal Anemometer Velocity (fpm)	2308	
Thermal Anemometer Temp (C)	~~2208~~ 13.8	
Inlet PID	1612	
Exhaust PID	1830	
Solar Panel Angle	55	
K/O Tank Drum Level	30%	
K/O Liquid Drained (gallons)	—	
Timer Setting	5-8	
Heat Trace (on/off)	Off	

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: open SVE02

LOCATION	VACUUM (IWC)	VELOCITY (fpm)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01			432	
SVE02			516	
SVE03			1517	
SVE04			823	

PRODUCT RECOVERY

LOCATION	DEPTH TO PRODUCT	DEPTH TO WATER	RECOVERED VOLUME	COMMENTS
~~SVE-3~~			0.6 gals	clear red
~~SVE-2RS~~				
~~SVE-4~~				
~~SVE-11S~~				
~~SVE-13S~~				
SVE-14S				

COMMENTS/OTHER MAINTENANCE:

Drain / blown down all lines

Received by OCD: 4/15/2024 11:02:03 AM

BELL FEDERAL GC B1 SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 3-7
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)	23714.6	1548
Pre K/O Vacuum (IWC)	15	
Thermal Anemometer Velocity (fpm)	1234	
Thermal Anemometer Temp (C)	29.25	
Inlet PID	486.8	
Exhaust PID	755.5	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		
Heat Trace (on/off)		

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: SVE-1 **SAMPLE TIME:** 1540
Analytes: TVPH (8015), VOCs (8260), Fixed Gas (CO/CO2/O2)
OPERATING WELLS

Change in Well Operation:

LOCATION	VACUUM (IWC)	VELOCITY (fpm)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01				
SVE02				
SVE03	15.04		480.2	
SVE04	15.57		394.3	

PRODUCT RECOVERY

LOCATION	DEPTH TO PRODUCT	DEPTH TO WATER	RECOVERED VOLUME	COMMENTS
SVE-1				
SVE-2RS				
SVE-4				
SVE-11S				
SVE-13S				
SVE-14S				

COMMENTS/OTHER MAINTENANCE:

Released to Imaging: 4/25/2024 2:00:50 PM

Received by OCD: 4/15/2024 11:02:03 AM

BELL FEDERAL GC B1 SVE SYSTEM
BIWEEKLY O&M FORM

DATE: 3-26
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)**	23868.6	1234
Pre K/O Vacuum (IWC)	15	
Thermal Anemometer Velocity (fpm)	1168	
Thermal Anemometer Temp (C)	27.5	
Inlet PID	522.7	
Exhaust PID	726.3	
Solar Panel Angle		
K/O Tank Drum Level		
K/O Liquid Drained (gallons)		
Timer Setting		
Heat Trace (on/off)		

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)	VELOCITY (fpm)	PID HEADSPACE (PPM)	ADJUSTMENTS
SVE01				
SVE02				
SVE03	15.08		502.6	
SVE04	15.52		415.3	

PRODUCT RECOVERY

LOCATION	DEPTH TO PRODUCT	DEPTH TO WATER	RECOVERED VOLUME	COMMENTS
SVE-1				
SVE-2RS				
SVE-4				
SVE-11S				
SVE-13S				
SVE-14S				

COMMENTS/OTHER MAINTENANCE:

system off on arrival

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APPENDIX B

Project Photographs

PROJECT PHOTOGRAPHS
Bell Federal GC B#1
San Juan County, New Mexico
Hilcorp Energy Company

Photograph 1 Runtime meter taken on December 27, 2023 at 1:53 PM Hours = 23,100.1	
Photograph 2 Runtime meter taken on March 26, 2024 at 12:34 PM Hours = 23,868.8	

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

ENSOLUM

APPENDIX C

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/26/2024 5:10:59 PM

JOB DESCRIPTION

Bell Fed Gc B1

JOB NUMBER

885-966-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Released to Imaging: 4/23/2024 2:00:50 PM

Eurofins Albuquerque

Job Notes

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

Authorization

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3/26/2024 5:10:59 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Laboratory Job ID: 885-966-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Bell Fed Gc B1

Job ID: 885-966-1

Job ID: 885-966-1 Eurofins Albuquerque

Job Narrative
885-966-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 3/12/2024 7:15 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 21.1°C.

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

GC/MS VOA
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
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Client Sample ID: SVE-1
Date Collected: 03/07/24 15:40
Date Received: 03/12/24 07:15
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-966-1
Matrix: Air

Method: SW846 8015D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	**4800**		250		ug/L			03/20/24 15:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*03/20/24 15:30*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			03/20/24 15:30	50
1,1,1-Trichloroethane	ND		5.0		ug/L			03/20/24 15:30	50
1,1,2,2-Tetrachloroethane	ND		10		ug/L			03/20/24 15:30	50
1,1,2-Trichloroethane	ND		5.0		ug/L			03/20/24 15:30	50
1,1-Dichloroethane	ND		5.0		ug/L			03/20/24 15:30	50
1,1-Dichloroethene	ND		5.0		ug/L			03/20/24 15:30	50
1,1-Dichloropropene	ND		5.0		ug/L			03/20/24 15:30	50
1,2,3-Trichlorobenzene	ND		5.0		ug/L			03/20/24 15:30	50
1,2,3-Trichloropropane	ND		10		ug/L			03/20/24 15:30	50
1,2,4-Trichlorobenzene	ND		5.0		ug/L			03/20/24 15:30	50
1,2,4-Trimethylbenzene	ND		5.0		ug/L			03/20/24 15:30	50
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/20/24 15:30	50
1,2-Dibromoethane (EDB)	ND		5.0		ug/L			03/20/24 15:30	50
1,2-Dichlorobenzene	ND		5.0		ug/L			03/20/24 15:30	50
1,2-Dichloroethane (EDC)	ND		5.0		ug/L			03/20/24 15:30	50
1,2-Dichloropropane	ND		5.0		ug/L			03/20/24 15:30	50
1,3,5-Trimethylbenzene	ND		5.0		ug/L			03/20/24 15:30	50
1,3-Dichlorobenzene	ND		5.0		ug/L			03/20/24 15:30	50
1,3-Dichloropropane	ND		5.0		ug/L			03/20/24 15:30	50
1,4-Dichlorobenzene	ND		5.0		ug/L			03/20/24 15:30	50
1-Methylnaphthalene	ND		20		ug/L			03/20/24 15:30	50
2,2-Dichloropropane	ND		10		ug/L			03/20/24 15:30	50
2-Butanone	ND		50		ug/L			03/20/24 15:30	50
2-Chlorotoluene	ND		5.0		ug/L			03/20/24 15:30	50
2-Hexanone	ND		50		ug/L			03/20/24 15:30	50
2-Methylnaphthalene	ND		20		ug/L			03/20/24 15:30	50
4-Chlorotoluene	ND		5.0		ug/L			03/20/24 15:30	50
4-Isopropyltoluene	ND		5.0		ug/L			03/20/24 15:30	50
4-Methyl-2-pentanone	ND		50		ug/L			03/20/24 15:30	50
Acetone	ND		50		ug/L			03/20/24 15:30	50
Benzene	**18**		5.0		ug/L			03/20/24 15:30	50
Bromobenzene	ND		5.0		ug/L			03/20/24 15:30	50
Bromodichloromethane	ND		5.0		ug/L			03/20/24 15:30	50
Dibromochloromethane	ND		5.0		ug/L			03/20/24 15:30	50
Bromoform	ND		5.0		ug/L			03/20/24 15:30	50
Bromomethane	ND		15		ug/L			03/20/24 15:30	50
Carbon disulfide	ND		50		ug/L			03/20/24 15:30	50
Carbon tetrachloride	ND		5.0		ug/L			03/20/24 15:30	50
Chlorobenzene	ND		5.0		ug/L			03/20/24 15:30	50
Chloroethane	ND		10		ug/L			03/20/24 15:30	50
Chloroform	ND		5.0		ug/L			03/20/24 15:30	50

Client Sample Results

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Client Sample ID: SVE-1
Date Collected: 03/07/24 15:40
Date Received: 03/12/24 07:15
Sample Container: Tedlar Bag 1L

Lab Sample ID: 885-966-1
Matrix: Air

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		15		ug/L			03/20/24 15:30	50
cis-1,2-Dichloroethene	ND		5.0		ug/L			03/20/24 15:30	50
cis-1,3-Dichloropropene	ND		5.0		ug/L			03/20/24 15:30	50
Dibromomethane	ND		5.0		ug/L			03/20/24 15:30	50
Dichlorodifluoromethane	ND		5.0		ug/L			03/20/24 15:30	50
Ethylbenzene	ND		5.0		ug/L			03/20/24 15:30	50
Hexachlorobutadiene	ND		5.0		ug/L			03/20/24 15:30	50
Isopropylbenzene	ND		5.0		ug/L			03/20/24 15:30	50
Methyl-tert-butyl Ether (MTBE)	ND		5.0		ug/L			03/20/24 15:30	50
Methylene Chloride	ND		15		ug/L			03/20/24 15:30	50
n-Butylbenzene	ND		15		ug/L			03/20/24 15:30	50
N-Propylbenzene	ND		5.0		ug/L			03/20/24 15:30	50
Naphthalene	ND		10		ug/L			03/20/24 15:30	50
sec-Butylbenzene	ND		5.0		ug/L			03/20/24 15:30	50
Styrene	ND		5.0		ug/L			03/20/24 15:30	50
tert-Butylbenzene	ND		5.0		ug/L			03/20/24 15:30	50
Tetrachloroethene (PCE)	ND		5.0		ug/L			03/20/24 15:30	50
Toluene	**44**		5.0		ug/L			03/20/24 15:30	50
trans-1,2-Dichloroethene	ND		5.0		ug/L			03/20/24 15:30	50
trans-1,3-Dichloropropene	ND		5.0		ug/L			03/20/24 15:30	50
Trichloroethene (TCE)	ND		5.0		ug/L			03/20/24 15:30	50
Trichlorofluoromethane	ND		5.0		ug/L			03/20/24 15:30	50
Vinyl chloride	ND		5.0		ug/L			03/20/24 15:30	50
Xylenes, Total	**21**		7.5		ug/L			03/20/24 15:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*03/20/24 15:30*	*50*
Toluene-d8 (Surr)	*109*		*70 - 130*		*03/20/24 15:30*	*50*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*03/20/24 15:30*	*50*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*03/20/24 15:30*	*50*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

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

Lab Sample ID: MB 885-2088/3
Matrix: Air
Analysis Batch: 2088

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		50		ug/L			03/20/24 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*03/20/24 13:04*	*1*

Lab Sample ID: LCS 885-2088/2
Matrix: Air
Analysis Batch: 2088

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			500	521		ug/L		104			

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 885-2090/3
Matrix: Air
Analysis Batch: 2090

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			03/20/24 13:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			03/20/24 13:04	1
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			03/20/24 13:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/20/24 13:04	1
1,1-Dichloroethane	ND		1.0		ug/L			03/20/24 13:04	1
1,1-Dichloroethene	ND		1.0		ug/L			03/20/24 13:04	1
1,1-Dichloropropene	ND		1.0		ug/L			03/20/24 13:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			03/20/24 13:04	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/20/24 13:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/20/24 13:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/20/24 13:04	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			03/20/24 13:04	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			03/20/24 13:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			03/20/24 13:04	1
1,2-Dichloroethane (EDC)	ND		1.0		ug/L			03/20/24 13:04	1
1,2-Dichloropropane	ND		1.0		ug/L			03/20/24 13:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/20/24 13:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			03/20/24 13:04	1
1,3-Dichloropropane	ND		1.0		ug/L			03/20/24 13:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			03/20/24 13:04	1
1-Methylnaphthalene	ND		4.0		ug/L			03/20/24 13:04	1
2,2-Dichloropropane	ND		2.0		ug/L			03/20/24 13:04	1
2-Butanone	ND		10		ug/L			03/20/24 13:04	1
2-Chlorotoluene	ND		1.0		ug/L			03/20/24 13:04	1
2-Hexanone	ND		10		ug/L			03/20/24 13:04	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

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

Lab Sample ID: MB 885-2090/3
Matrix: Air
Analysis Batch: 2090

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		4.0		ug/L			03/20/24 13:04	1
4-Chlorotoluene	ND		1.0		ug/L			03/20/24 13:04	1
4-Isopropyltoluene	ND		1.0		ug/L			03/20/24 13:04	1
4-Methyl-2-pentanone	ND		10		ug/L			03/20/24 13:04	1
Acetone	ND		10		ug/L			03/20/24 13:04	1
Benzene	ND		1.0		ug/L			03/20/24 13:04	1
Bromobenzene	ND		1.0		ug/L			03/20/24 13:04	1
Bromodichloromethane	ND		1.0		ug/L			03/20/24 13:04	1
Dibromochloromethane	ND		1.0		ug/L			03/20/24 13:04	1
Bromoform	ND		1.0		ug/L			03/20/24 13:04	1
Bromomethane	ND		3.0		ug/L			03/20/24 13:04	1
Carbon disulfide	ND		10		ug/L			03/20/24 13:04	1
Carbon tetrachloride	ND		1.0		ug/L			03/20/24 13:04	1
Chlorobenzene	ND		1.0		ug/L			03/20/24 13:04	1
Chloroethane	ND		2.0		ug/L			03/20/24 13:04	1
Chloroform	ND		1.0		ug/L			03/20/24 13:04	1
Chloromethane	ND		3.0		ug/L			03/20/24 13:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/20/24 13:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/20/24 13:04	1
Dibromomethane	ND		1.0		ug/L			03/20/24 13:04	1
Dichlorodifluoromethane	ND		1.0		ug/L			03/20/24 13:04	1
Ethylbenzene	ND		1.0		ug/L			03/20/24 13:04	1
Hexachlorobutadiene	ND		1.0		ug/L			03/20/24 13:04	1
Isopropylbenzene	ND		1.0		ug/L			03/20/24 13:04	1
Methyl-tert-butyl Ether (MTBE)	ND		1.0		ug/L			03/20/24 13:04	1
Methylene Chloride	ND		3.0		ug/L			03/20/24 13:04	1
n-Butylbenzene	ND		3.0		ug/L			03/20/24 13:04	1
N-Propylbenzene	ND		1.0		ug/L			03/20/24 13:04	1
Naphthalene	ND		2.0		ug/L			03/20/24 13:04	1
sec-Butylbenzene	ND		1.0		ug/L			03/20/24 13:04	1
Styrene	ND		1.0		ug/L			03/20/24 13:04	1
tert-Butylbenzene	ND		1.0		ug/L			03/20/24 13:04	1
Tetrachloroethene (PCE)	ND		1.0		ug/L			03/20/24 13:04	1
Toluene	ND		1.0		ug/L			03/20/24 13:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			03/20/24 13:04	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/20/24 13:04	1
Trichloroethene (TCE)	ND		1.0		ug/L			03/20/24 13:04	1
Trichlorofluoromethane	ND		1.0		ug/L			03/20/24 13:04	1
Vinyl chloride	ND		1.0		ug/L			03/20/24 13:04	1
Xylenes, Total	ND		1.5		ug/L			03/20/24 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*03/20/24 13:04*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*03/20/24 13:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*03/20/24 13:04*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*03/20/24 13:04*	*1*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

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

Lab Sample ID: LCS 885-2090/2
Matrix: Air
Analysis Batch: 2090

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene			20.1	18.1		ug/L		90			
Benzene			20.1	19.7		ug/L		98			
Chlorobenzene			20.1	20.7		ug/L		103			
Toluene			20.2	19.5		ug/L		97			
Trichloroethene (TCE)			20.2	19.2		ug/L		95			

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*

QC Association Summary

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

GC/MS VOA

Analysis Batch: 2088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-966-1	SVE-1	Total/NA	Air	8015D	
MB 885-2088/3	Method Blank	Total/NA	Air	8015D	
LCS 885-2088/2	Lab Control Sample	Total/NA	Air	8015D	

Analysis Batch: 2090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-966-1	SVE-1	Total/NA	Air	8260B	
MB 885-2090/3	Method Blank	Total/NA	Air	8260B	
LCS 885-2090/2	Lab Control Sample	Total/NA	Air	8260B	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Client Sample ID: SVE-1
Date Collected: 03/07/24 15:40
Date Received: 03/12/24 07:15

Lab Sample ID: 885-966-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		50	2088	CM	EET ALB	03/20/24 15:30
Total/NA	Analysis	8260B		50	2090	CM	EET ALB	03/20/24 15:30

Laboratory References:

= , 1120 South 27th Street, Billings, MT 59107

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

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

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Laboratory: Eurofins Albuquerque (Continued)

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

Authority	Program	Identification Number	Expiration Date

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

Analysis Method	Prep Method	Matrix	Analyte
8260B		Air	Dibromomethane
8260B		Air	Dichlorodifluoromethane
8260B		Air	Ethylbenzene
8260B		Air	Hexachlorobutadiene
8260B		Air	Isopropylbenzene
8260B		Air	Methylene Chloride
8260B		Air	Methyl-tert-butyl Ether (MTBE)
8260B		Air	Naphthalene
8260B		Air	n-Butylbenzene
8260B		Air	N-Propylbenzene
8260B		Air	sec-Butylbenzene
8260B		Air	Styrene
8260B		Air	tert-Butylbenzene
8260B		Air	Tetrachloroethene (PCE)
8260B		Air	Toluene
8260B		Air	trans-1,2-Dichloroethene
8260B		Air	trans-1,3-Dichloropropene
8260B		Air	Trichloroethene (TCE)
8260B		Air	Trichlorofluoromethane
8260B		Air	Vinyl chloride
8260B		Air	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

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

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

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Laboratory: Eurofins Albuquerque (Continued)

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

Authority	Program	Identification Number	Expiration Date

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

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

Method Summary

Client: Hilcorp Energy
Project/Site: Bell Fed Gc B1

Job ID: 885-966-1

Method	Method Description	Protocol	Laboratory
8015D	Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)	SW846	EET ALB
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET ALB
Subcontract	Fixed Gases	None	
5030C	Collection/Prep Tedlar Bag (P&T)	SW846	EET ALB

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= , 1120 South 27th Street, Billings, MT 59107

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

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ANALYTICAL SUMMARY REPORT

March 25, 2024

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

Work Order: B24030741 Quote ID: B15626

Project Name: Bell Fed Gc B1, 88500415

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 3/13/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24030741-001	SVE-1 (885-966-1)	03/07/24 15:40	03/13/24	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond,/1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 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: Bell Fed Gc B1, 88500415
Lab ID: B24030741-001
Client Sample ID: SVE-1 (885-966-1)

Report Date: 03/25/24
Collection Date: 03/07/24 15:40
DateReceived: 03/13/24
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	17.63	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Nitrogen	80.00	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Carbon Dioxide	2.28	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Hexanes plus	0.09	Mol %		0.01		GPA 2261-95	03/14/24 01:18 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
Hexanes plus	0.038	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
GPM Total	0.038	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
GPM Pentanes plus	0.038	gpm		0.001		GPA 2261-95	03/14/24 01:18 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	4			1		GPA 2261-95	03/14/24 01:18 / jrj
Net BTU per cu ft @ std cond. (LHV)	4			1		GPA 2261-95	03/14/24 01:18 / jrj
Pseudo-critical Pressure, psia	548			1		GPA 2261-95	03/14/24 01:18 / jrj
Pseudo-critical Temperature, deg R	244			1		GPA 2261-95	03/14/24 01:18 / jrj
Specific Gravity @ 60/60F	1.01			0.001		D3588-81	03/14/24 01:18 / jrj
Air, %	80.54			0.01		GPA 2261-95	03/14/24 01:18 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	03/14/24 01:18 / 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:** B24030741 **Report Date:** 03/25/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **GPA 2261-95**										Batch: R418117
Lab ID: **B24030515-002ADUP**	12	Sample Duplicate				Run: GCNGA-B_240314A				03/14/24 11:36
Oxygen		21.7	Mol %	0.01				0.5	20	
Nitrogen		78.1	Mol %	0.01				0.1	20	
Carbon Dioxide		0.12	Mol %	0.01				8.7	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		0.08	Mol %	0.01				12	20	
Lab ID: **LCS031424**	11	Laboratory Control Sample				Run: GCNGA-B_240314A				03/14/24 02:59
Oxygen		0.64	Mol %	0.01	128	70	130			
Nitrogen		6.13	Mol %	0.01	102	70	130			
Carbon Dioxide		0.94	Mol %	0.01	95	70	130			
Methane		74.6	Mol %	0.01	100	70	130			
Ethane		6.09	Mol %	0.01	101	70	130			
Propane		5.00	Mol %	0.01	101	70	130			
Isobutane		1.69	Mol %	0.01	84	70	130			
n-Butane		2.00	Mol %	0.01	100	70	130			
Isopentane		0.99	Mol %	0.01	99	70	130			
n-Pentane		1.01	Mol %	0.01	101	70	130			
Hexanes plus		0.81	Mol %	0.01	101	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

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Work Order Receipt Checklist

Hall Environmental

B24030741

Login completed by: Danielle N. Harris
Date Received: 3/13/2024

Reviewed by: jmiller
Received by: DNH

Reviewed Date: 3/15/2024
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:	12.4°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

Released to Imaging: 4/25/2024 2:00:50 PM
Received by OCD: 4/15/2024 11:02:03 AM

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Freeman, Andy	Carrier Tracking No(s):	COC No: 885-118.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: andy.freeman@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Energy Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon; State - New Mexico		Job #: 885-966-1
Address: 1120 South 27th Street,	Due Date Requested: 3/22/2024			
City: Billings	TAT Requested (days):			
State, Zip: MT, 59107				
Phone:	PO #:			
Email:	WO #:			
Project Name: Bell Fed Gc B1	Project #: 88500415			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Fixed Gases)/ Fixed Gases	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SVE-1 (885-966-1)	3/7/24	15:40 Mountain		Air			X	1	B240307411

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

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time: 3-12-24 15:54	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/13/24 0910	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Released to Imaging: 4/25/2024 2:00:50 PM
Received by OCD: 4/15/2024 11:02:03 AM

ICOC No:
885-118

Containers

Count	Container Type	Preservative
1	Tedlar Bag 1L	None

Released to Imaging: 4/25/2024 2:00:50 PM
Received by OCD: 4/15/2024 11:02:03 AM

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: Bell Fed GC B 1

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
3-7	1540	air	SVE-1	2 Tedlar		885-966 COC

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				
							✓			✓	✓				

Date	Time	Relinquished by:	Received by	Via	Date	Time
3/11/24	1643				3/11/24	1643
3/11/24	1800			courier	3/12/24	7:15

Remarks:

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-966-1

Login Number: 966 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Cason, Cheyenne

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	False	Thermal preservation not required.
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.	True	
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.	True	

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 333272

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 333272
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Created By	Condition	Condition Date
nvelez	1. Continue with O & M schedule. 2. Submit next quarterly report by July 15, 2024.	4/25/2024