ENSOLUM

October 25, 2023

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

Review of the 3Q2023 Solar SVE for Trunk S:
Content Satisfactory
1. Continue to operate SVE system and conduct O&M as scheduled.
2. Continue to submit reports on a quarterly basis.

Subject: **2023 Third Quarter – Solar SVE System Update**
Trunk S
Harvest Four Corners, LLC
Incident Number NCS1931842879
Remediation Permit Number 3RP-1014
Rio Arriba County, New Mexico

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Harvest Four Corners, LLC (Harvest), presents the following *2023 Third Quarter – Solar SVE System Update* report summarizing the soil vapor extraction (SVE) system performance at the Trunk S (Site), located in Unit I of Section 7, Township 25 North, Range 03 West, in Rio Arriba County, New Mexico (Figure 1).

BACKGROUND

The solar SVE system was installed in late 2019, with full time system operation beginning on July 16, 2020, to remediate subsurface impacts following a release on June 25, 2019. The release occurred from an underground natural gas pipeline leak associated with the Site and consisted of more than 25 barrels (bbls) of condensate and 278.5 thousand cubic feet (MCF) of natural gas. Harvest reported the release to the New Mexico Oil Conservation Division (NMOCD) on a release Notification and Corrective Action Form C-141 on September 20, 2019, and the event was assigned Incident Number NCS1931842879. Approximately 2,000 cubic yards (yd^3) of impacted soil were excavated and transported off site for disposal. Due to the extent of the release, the excavation was unsuccessful at removing all impacted soil and the excavation was backfilled with the stockpiled soils after repairing the pipeline leak. A solar SVE system was installed to remediate residual impacts resulting from the release. Reports summarizing remediation system operation for previous quarters of system operation have been submitted to the NMOCD.

SOLAR SVE SYSTEM OPERATION AND MONITORING

The solar SVE system is comprised of five SVE wells (SB-1 through SB-5) and a VariSun Mobile Solar SVE unit consisting of a 4.6 horsepower vacuum blower capable of extracting 190 cubic feet per minute (cfm) at 50 inches of water column (IWC) vacuum. Each SVE well has a dedicated leg with an adjustable valve and vacuum gauge to control the individual flow rates and vacuum prior to manifolding together before the liquid knockout tank and blower. Harvest utilized a solar-powered SVE system due to the remote location and the lack of electrical grid power at the Site. The direct-drive blower motor is connected to solar panels via a motor controller that automatically starts the system as sunlight is available and throttles the blower up as sun power increases throughout the day to maximize efficiency. Seasonally, there are approximately 10 hours in the winter and 12 hours in the summer of available solar power in Farmington, New Mexico. The complete solar SVE system is constructed as one unit designed for utilization at off-grid locations and operates autonomously. The layout of the solar SVE system is depicted on Figure 2.

Between full time startup of the solar SVE system on July 16, 2020, and the last quarterly Site visit on September 20, 2023, there have been 1,162 days of operation, with an estimated 13,605 total hours of nominal daylight available for solar SVE system operations. Since installation, the system had an actual runtime of 13,993 hours, for an overall uptime of 102.9 percent (%) of the available runtime hours based on the average available nominal daylight hours (per the National Renewable Energy Laboratory (NREL)). A photographic log of the runtime hours meter readings is included as Appendix A. Below is a table summarizing SVE system runtime in comparison with nominal available daylight hours per month.

SVE System Runtime

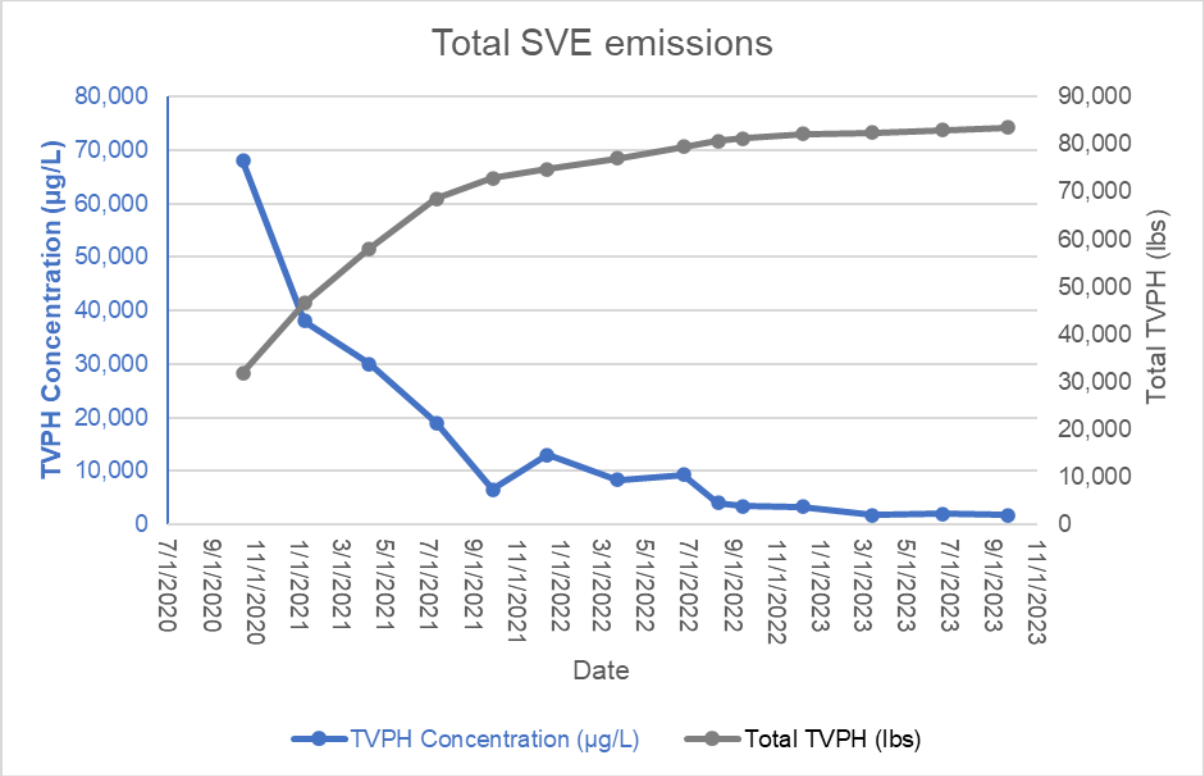
Time Period	Start up July 16, 2020 to March 15, 2023	June 22, 2023 to June 30, 2023	July 1, 2023 to July 31, 2023	August 1, 2023 to August 31, 2023	September 1, 2023 to September 20, 2023
Days	1071	9	31	31	20
Avg. Nominal Daylight Hours	11.58	14	14	13	12
Available Runtime Hours	12,402	126	434	403	240

Total Available Daylight Runtime Hours	**13,605**
Actual Runtime Hours	**13,993**
Cumulative % Runtime	**102.9%**
Quarterly Available Daylight Runtime Hours	**1,203**
Quarterly Runtime Hours	**1,214**
Quarterly % Runtime	**100.9%**

AIR EMISSIONS MONITORING

An initial air sample was collected on July 16, 2020, from the influent side of the blower on the SVE system. Subsequent air samples were collected quarterly with the most recent sample collected on September 20, 2023 (Table 1). Samples were collected in 1-liter Tedlar® bags via a high vacuum air sampler and submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for analyses of volatile organic compounds (VOCs) following United States Environmental Protection Agency (EPA) Method 8260B, total volatile petroleum hydrocarbons (TVPH) following EPA Method 8015, and oxygen and carbon dioxide following Gas Processors Association Method 2261. The laboratory analytical report from the September 2023 sampling event is included as Appendix B.

Estimated air emissions were calculated using air sample data collected to date (Table 2). The impacted mass source removal via the solar SVE system to-date is estimated to be 83,485 pounds (lbs) (or 41.74 tons) of TVPH. Since system startup, petroleum hydrocarbon emissions have steadily declined as shown in the chart below.



Notes:

TVPH – total volatile petroleum hydrocarbons
µg/L – micrograms per liter
lbs – pounds

The mass removal rate has steadily decreased over time. Due to an increased flow rate, the September 2023 TVPH emissions rate increased slightly from June 2023 to approximately 0.47 pounds per hour (lbs/hr) or approximately 6.23 pounds per day (lbs/day), although the TVPH concentration continues to decrease.

PLAN FOR NEXT QUARTER OF OPERATION

During the upcoming fourth quarter 2023 operations, Ensolum will continue to visit the Site monthly to ensure a minimum of 90% runtime efficiency continues and that any maintenance issues are addressed in a timely manner. An air sample will be collected in the fourth quarter and analyzed for VOCs, TVPH, and oxygen and carbon dioxide. An updated quarterly report with sample results, runtime, and mass source removal will be submitted under separate cover.

Quarterly air sampling and reporting will continue until the mass removal rate declines to an asymptotic level and indicates hydrocarbon impacts have been reduced at the Site to the maximum extent practicable. At that time, Ensolum will conduct additional soil sampling to investigate potential residual impacts and request closure if concentrations of benzene, toluene, ethylbenzene, xylenes (BTEX) and TVPH are below the applicable Table I Closure Criteria defined in Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC).

If the final delineation samples indicate hydrocarbon impact has been reduced to concentrations in compliance with Table I Closure Criteria, Ensolum will present the confirmation laboratory analysis data in a report and request closure of the release. Should the results indicate analytes in the soil exceed the Table I Closure Criteria, Ensolum will either make operational adjustments

and restart the SVE system based on the results of the investigation or develop an alternative remedial approach to reach Site closure.

Ensolum appreciates the opportunity to provide this report to the NMOCD. If you have any questions or comments regarding this update, do not hesitate to contact Danny Burns at (303) 601-1420 or via email at dburns@ensolum.com or Monica Smith at (505) 632-4625 or at msmith@harvestmidstream.com.

Sincerely,

ENSOLUM, LLC

Reece Hanson
Staff Geologist

Danny Burns
Senior Geologist

APPENDICES

Figure 1 – Site Location Map
Figure 2 – SVE System Layout
Table 1 – Soil Vapor Extraction System Laboratory Analytical Results
Table 2 – Soil Vapor Extraction System Mass Removal and Emissions
Appendix A – Photographic Log
Appendix B – Laboratory Analytical Report

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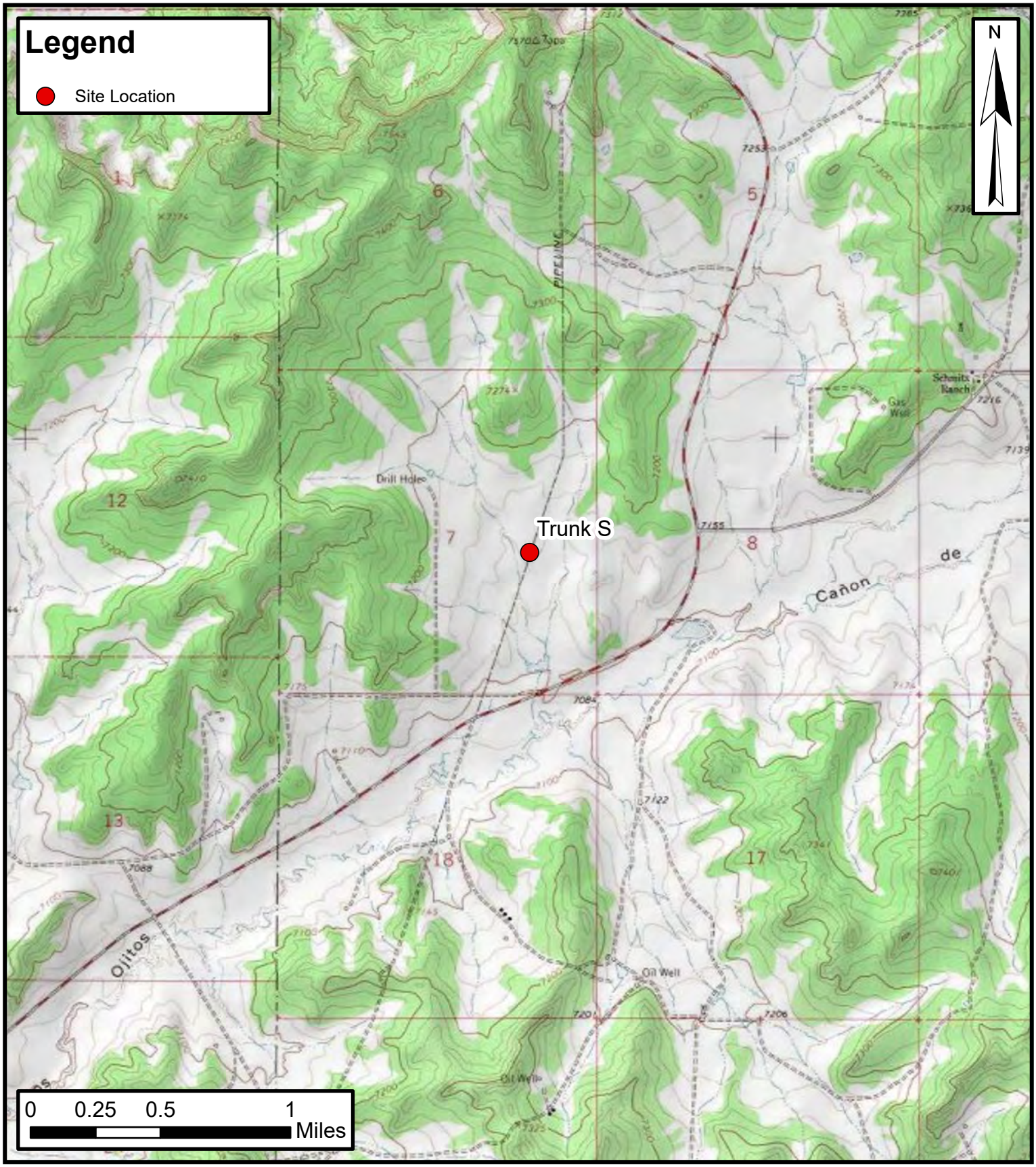
FIGURES



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Environmental, Engineering and Hydrogeologic Consultants

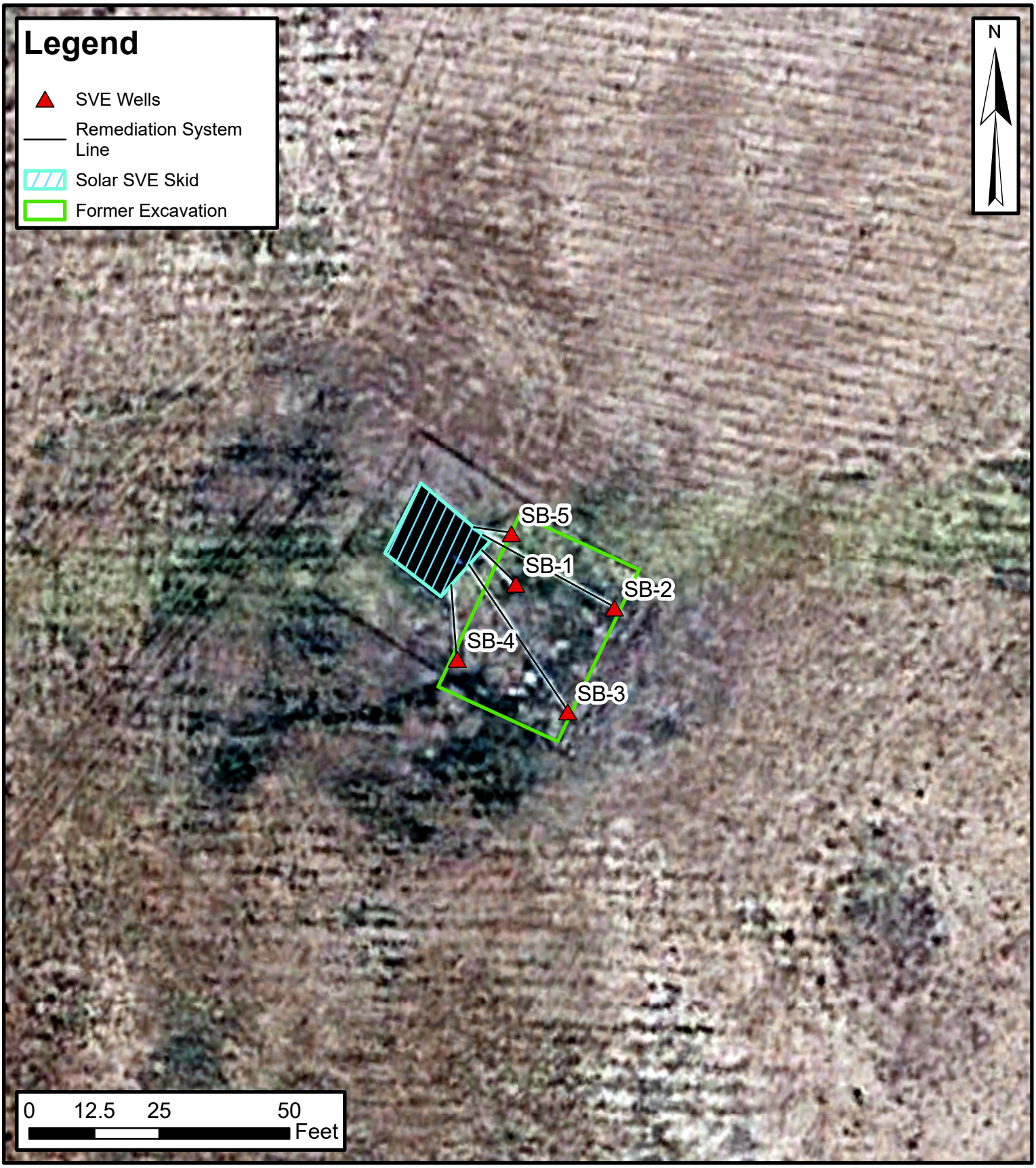
Site Location Map

Trunk S
Harvest Four Corners, LLC

36.41189°, -107.18085°
Rio Arriba County, New Mexico

FIGURE
1

Sources: Environmental Systems Research Institute (ESRI), National Geographic society, i-cubed



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SVE System Layout

Trunk S
Harvest Four Corners, LLC
36.41189°, -107.18085°
Rio Arriba County, New Mexico

FIGURE
2

Sources: Google Earth

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TABLES

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TABLE 1
SOIL VAPOR EXTRACTION SYSTEM LABORATORY ANALYTICAL RESULTS
Trunk S
Harvest Four Corners, LLC
Rio Arriba County, New Mexico

Date	PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH/GRO (µg/L)	Oxygen (Mol %)	Carbon Dioxide (Mol %)
7/16/2020*	4,268	1,700	1,570	29.4	517.9	NA	20.20	0.67
9/3/2020*	1,100	45	220	22	230	NA	NA	NA
9/30/2020*	1,200	49	480	86	770	NA	NA	NA
10/14/2020*	1,357	150	460	15	270	68,000	20.94	0.93
1/8/2021*	786	76	310	9.1	150	38,000	20.81	0.88
4/9/2021*	898	50	160	8.2	140	30,000	21.54	0.49
7/12/2021*	859	33	150	12	210	19,000	21.47	0.49
9/29/2020*	561	15	77	5.3	85	6,500	21.57	0.54
12/14/2021*	NM	22	140	10	170	13,000	21.83	0.40
3/23/2022*	545	17	90	7.9	130	8,300	21.95	0.35
6/23/2022	605	6.5	42	3.5	49	9,300	21.39	0.45
8/11/2022	789	6.4	48	5.5	78	4,000	NA	NA
9/15/2022	487	5.7	37	4.6	59	3,400	20.91	0.66
12/7/2022	457	3.8	38	5.2	67	3,300	21.35	0.63
3/15/2023	370	2.7	24	2.4	32	1,800	21.34	0.53
6/21/2023	418	2.2	15	2.3	27	2,000	21.04	0.54
9/20/2023	318	1.3	16	2.4	35	1,700	21.42	0.53

Notes:

* - data collected by Animas Environmental
GRO: gasoline range organics
µg/L: micrograms per liter
Mol'%: mole percent
NM: not measured
NA: not analyzed
PID: photoionization detector
ppm: parts per million
TVPH: total volatile petroleum hydrocarbons

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TABLE 2
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS
Trunk S
Harvest Four Corners, LLC
Rio Arriba County, New Mexico

Laboratory Analysis

Date	PID (ppm)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TVPH (µg/L)
7/16/2020	4,268	1,700	1,570	29.4	517.9	NS
9/3/2020	1,100	45	220	22	230	NS
9/30/2020	1,200	49	480	86	770	NS
10/14/2020	1,357	150	460	15	270	68,000
1/8/2021	786	76	310	9.1	150	38,000
4/9/2021	898	50	160	8.2	140	30,000
7/12/2021	859	33	150	12	210	19,000
9/29/2021	561	15	77	5.3	85	6,500
12/14/2021	553	22	140	10	170	13,000
3/23/2022	545	17	90	7.9	130	8,300
6/23/2022	605	6.5	42	3.5	49	9,300
8/11/2022	789	6.4	48	5.5	78	4,000
9/15/2022	487	5.7	37	4.6	59	3,400
12/7/2022	457	3.8	38	5.2	67	3,300
3/15/2023	370	2.7	24	2.4	32	1,800
6/21/2023	418	2.2	15	2.3	27	2,000
9/20/2023	318	1.3	16	2.4	35	1,700
Average	916	129	228	14	178	14,879

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TABLE 2
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS
Trunk S
Harvest Four Corners, LLC
Rio Arriba County, New Mexico

Flow and Laboratory Analysis

Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
7/16/2020	322	322	180	166	3	55	--	--
9/3/2020	963	641	180	185	5	77	--	--
9/30/2020	1,298	335	5	38	6	55	--	--
10/14/2020	1,450	152	5	23	2	25	31,899	15.9
1/8/2021	2,275	825	33	112	3	61	14,718	7.4
4/9/2021	3,246	971	21	79	3	48	11,483	5.7
7/12/2021	4,535	1,289	17	64	4	72	10,453	5.2
9/29/2021	5,550	1,015	8	40	3	52	4,284	2.1
12/14/2021	6,312	762	2	13	1	15	1,862	0.9
3/23/2022	7,309	997	5	32	2	41	2,303	1.2
6/23/2022	8,536	1,227	3	14	1	20	2,455	1.2
8/11/2022	9,208	672	2	11	1	15	1,175	0.6
9/15/2022	9,648	440	1	7	1	11	578	0.3
12/7/2022	10,668	1,020	1	6	1	11	901	0.5
3/15/2023	11,693	1,025	0	4	1	7	391	0.2
6/21/2023	12,779	1,086	1	6	1	9	413	0.2
9/20/2023	13,993	1,214	1	5	1	9	569	0.3
Total Mass Recovery to Date			464	803	40	581	83,485	42

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

VOC : volatile organic compounds

*VOC Mass Removed (lbs) = Influent VOCs (mg/m^3) * Air Flow Rates (cfm) * (1 m^3/35.3147 ft^3) * (1 lb/453,592 mg) * Time Period (min)*

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TABLE 2
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL AND EMISSIONS
Trunk S
Harvest Four Corners, LLC
Rio Arriba County, New Mexico

Average 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)
7/16/2020	88	1,700,160	1,700,160	0.56	0.52	0.010	0.17	--
9/3/2020	86	5,007,720	3,307,560	0.28	0.29	0.008	0.12	--
9/30/2020	87	6,756,420	1,748,700	0.02	0.11	0.018	0.16	--
10/14/2020	86	7,540,740	784,320	0.03	0.15	0.016	0.17	22.00
1/8/2021	94	12,193,740	4,653,000	0.04	0.14	0.004	0.07	17.84
4/9/2021	92	17,553,660	5,359,920	0.02	0.08	0.003	0.05	11.83
7/12/2021	85	24,127,560	6,573,900	0.01	0.05	0.003	0.06	8.11
9/29/2021	92	29,730,360	5,602,800	0.01	0.04	0.003	0.05	4.22
12/14/2021	42	31,650,600	1,920,240	0.00	0.02	0.001	0.02	2.44
3/23/2022	74	36,077,280	4,426,680	0.01	0.03	0.002	0.04	2.31
6/23/2022	47.6	39,581,592	3,504,312	0.00	0.01	0.001	0.02	2.00
8/11/2022	93	43,331,352	3,749,760	0.00	0.02	0.002	0.02	1.75
9/15/2022	97	45,892,152	2,560,800	0.00	0.02	0.002	0.02	1.31
12/7/2022	44	48,584,952	2,692,800	0.00	0.01	0.001	0.01	0.88
3/15/2023	36	50,798,952	2,214,000	0.00	0.00	0.001	0.01	0.38
6/21/2023	71	55,425,312	4,626,360	0.00	0.01	0.001	0.01	0.38
9/20/2023	65	60,123,492	4,698,180	0.00	0.00	0.001	0.01	0.47
			Average	0.06	0.09	0.00	0.06	5.42

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APPENDIX A

Photographic Log

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Photographic Log
Trunk S
Harvest Four Corners, LLC
Rio Arriba County, New Mexico

Photo #1
SVE Hours Reading 7/27/2023

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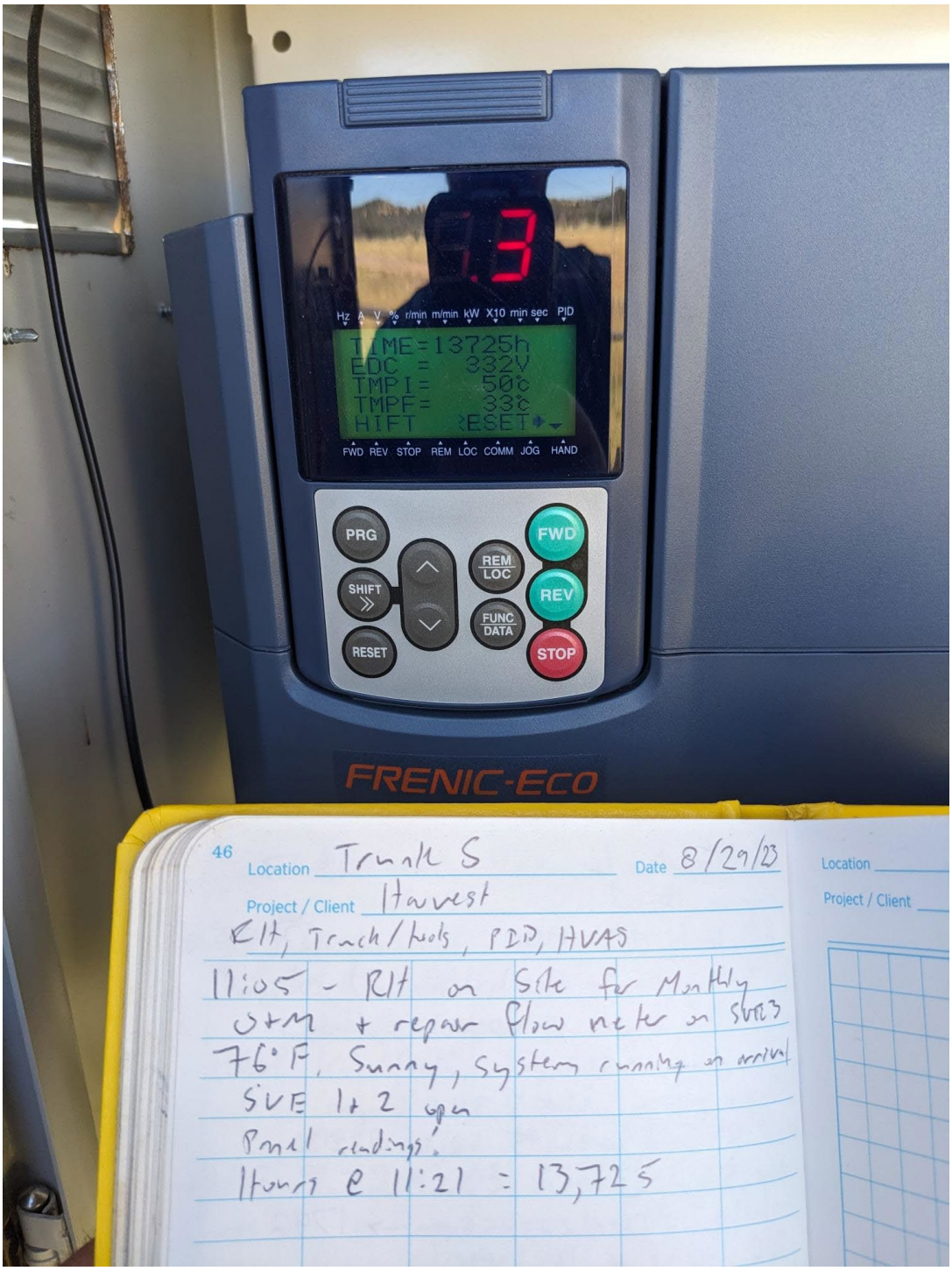
Photographic Log
Trunk S
Harvest Four Corners, LLC
Rio Arriba County, New Mexico

Photo #2
SVE Hours Reading 8/29/2023



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Environmental, Engineering and Hydrogeologic Consultants

Photographic Log
Trunk S
Harvest Four Corners, LLC
Rio Arriba County, New Mexico

Photo #3
SVE Hours Reading 9/20/2023

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APPENDIX B

Laboratory Analytical Report

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 03, 2023

Monica Smith

Harvest
1755 Arroyo Dr.
Bloomfield, NM 87413
TEL: (505) 632-4475
FAX:

RE: Trunk S OrderNo.: 2309C71

Dear Monica Smith:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/22/2023 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 don't hesitate to contact HEAL 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 **2309C71**
Date Reported: **10/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent A
Project: Trunk S
Collection Date: 9/20/2023 9:40:00 AM
Lab ID: 2309C71-001 **Matrix:** AIR
Received Date: 9/22/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**CCM**
Gasoline Range Organics (GRO)	1700	50		µg/L	10	9/25/2023 2:00:00 PM	G99960
Surr: BFB	89.0	70-130		%Rec	10	9/25/2023 2:00:00 PM	G99960
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	1.3	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Toluene	16	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Ethylbenzene	2.4	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2,4-Trimethylbenzene	1.3	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,3,5-Trimethylbenzene	1.6	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Naphthalene	ND	2.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1-Methylnaphthalene	ND	4.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
2-Methylnaphthalene	ND	4.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Acetone	ND	10		µg/L	10	9/25/2023 2:00:00 PM	R99960
Bromobenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Bromodichloromethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Bromoform	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Bromomethane	ND	2.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
2-Butanone	ND	10		µg/L	10	9/25/2023 2:00:00 PM	R99960
Carbon disulfide	ND	10		µg/L	10	9/25/2023 2:00:00 PM	R99960
Carbon tetrachloride	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Chlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Chloroethane	ND	2.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Chloroform	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Chloromethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
2-Chlorotoluene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
4-Chlorotoluene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
cis-1,2-DCE	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
cis-1,3-Dichloropropene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Dibromochloromethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Dibromomethane	ND	2.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2-Dichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,3-Dichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,4-Dichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Dichlorodifluoromethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,1-Dichloroethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,1-Dichloroethene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960

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 **2309C71**
Date Reported: **10/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent A
Project: Trunk S
Collection Date: 9/20/2023 9:40:00 AM
Lab ID: 2309C71-001 **Matrix:** AIR **Received Date:** 9/22/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,3-Dichloropropane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
2,2-Dichloropropane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,1-Dichloropropene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Hexachlorobutadiene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
2-Hexanone	ND	10		µg/L	10	9/25/2023 2:00:00 PM	R99960
Isopropylbenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
4-Isopropyltoluene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
4-Methyl-2-pentanone	ND	10		µg/L	10	9/25/2023 2:00:00 PM	R99960
Methylene chloride	ND	3.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
n-Butylbenzene	ND	3.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
n-Propylbenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
sec-Butylbenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Styrene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
tert-Butylbenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Tetrachloroethene (PCE)	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
trans-1,2-DCE	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
trans-1,3-Dichloropropene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2,3-Trichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2,4-Trichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,1,1-Trichloroethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,1,2-Trichloroethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Trichloroethene (TCE)	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Trichlorofluoromethane	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
1,2,3-Trichloropropane	ND	2.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Vinyl chloride	ND	1.0		µg/L	10	9/25/2023 2:00:00 PM	R99960
Xylenes, Total	35	1.5		µg/L	10	9/25/2023 2:00:00 PM	R99960
Surr: Dibromofluoromethane	87.3	70-130		%Rec	10	9/25/2023 2:00:00 PM	R99960
Surr: 1,2-Dichloroethane-d4	79.5	70-130		%Rec	10	9/25/2023 2:00:00 PM	R99960
Surr: Toluene-d8	124	70-130		%Rec	10	9/25/2023 2:00:00 PM	R99960
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	10	9/25/2023 2:00:00 PM	R99960

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 **2309C71**
Date Reported: **10/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent B
Project: Trunk S
Collection Date: 9/20/2023 9:55:00 AM
Lab ID: 2309C71-002 **Matrix:** AIR **Received Date:** 9/22/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	1200	50		µg/L	10	9/25/2023 2:24:00 PM	G99960
Surr: BFB	90.9	70-130		%Rec	10	9/25/2023 2:24:00 PM	G99960
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Toluene	11	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Ethylbenzene	1.7	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2,4-Trimethylbenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,3,5-Trimethylbenzene	1.1	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Naphthalene	ND	2.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1-Methylnaphthalene	ND	4.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
2-Methylnaphthalene	ND	4.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Acetone	ND	10		µg/L	10	9/25/2023 2:24:00 PM	R99960
Bromobenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Bromodichloromethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Bromoform	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Bromomethane	ND	2.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
2-Butanone	ND	10		µg/L	10	9/25/2023 2:24:00 PM	R99960
Carbon disulfide	ND	10		µg/L	10	9/25/2023 2:24:00 PM	R99960
Carbon tetrachloride	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Chlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Chloroethane	ND	2.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Chloroform	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Chloromethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
2-Chlorotoluene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
4-Chlorotoluene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
cis-1,2-DCE	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
cis-1,3-Dichloropropene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Dibromochloromethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Dibromomethane	ND	2.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2-Dichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,3-Dichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,4-Dichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Dichlorodifluoromethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,1-Dichloroethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,1-Dichloroethene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960

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 **2309C71**
Date Reported: **10/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent B
Project: Trunk S
Collection Date: 9/20/2023 9:55:00 AM
Lab ID: 2309C71-002 **Matrix:** AIR **Received Date:** 9/22/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,3-Dichloropropane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
2,2-Dichloropropane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,1-Dichloropropene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Hexachlorobutadiene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
2-Hexanone	ND	10		µg/L	10	9/25/2023 2:24:00 PM	R99960
Isopropylbenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
4-Isopropyltoluene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
4-Methyl-2-pentanone	ND	10		µg/L	10	9/25/2023 2:24:00 PM	R99960
Methylene chloride	ND	3.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
n-Butylbenzene	ND	3.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
n-Propylbenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
sec-Butylbenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Styrene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
tert-Butylbenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Tetrachloroethene (PCE)	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
trans-1,2-DCE	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
trans-1,3-Dichloropropene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2,3-Trichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2,4-Trichlorobenzene	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,1,1-Trichloroethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,1,2-Trichloroethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Trichloroethene (TCE)	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Trichlorofluoromethane	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
1,2,3-Trichloropropane	ND	2.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Vinyl chloride	ND	1.0		µg/L	10	9/25/2023 2:24:00 PM	R99960
Xylenes, Total	24	1.5		µg/L	10	9/25/2023 2:24:00 PM	R99960
Surr: Dibromofluoromethane	89.7	70-130		%Rec	10	9/25/2023 2:24:00 PM	R99960
Surr: 1,2-Dichloroethane-d4	83.1	70-130		%Rec	10	9/25/2023 2:24:00 PM	R99960
Surr: Toluene-d8	117	70-130		%Rec	10	9/25/2023 2:24:00 PM	R99960
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	10	9/25/2023 2:24:00 PM	R99960

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

October 02, 2023

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

Work Order: B23092178 Quote ID: B15626

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 2 samples for Hall Environmental on 9/26/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B23092178-001	2309C71-001B, Influent A	09/20/23 9:40	09/26/23	Air	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond,/1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60
B23092178-002	2309C71-002B, Influent B	09/20/23 9:55	09/26/23	Air	Same As Above

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: B23092178-001
Client Sample ID: 2309C71-001B, Influent A

Report Date: 10/02/23
Collection Date: 09/20/23 09:40
DateReceived: 09/26/23
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.42	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Nitrogen	77.99	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Carbon Dioxide	0.53	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Methane	0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Hexanes plus	0.05	Mol %		0.01		GPA 2261-95	09/27/23 11:48 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
Hexanes plus	0.021	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
GPM Total	0.021	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
GPM Pentanes plus	0.021	gpm		0.001		GPA 2261-95	09/27/23 11:48 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	2			1		GPA 2261-95	09/27/23 11:48 / jrj
Net BTU per cu ft @ std cond. (LHV)	2			1		GPA 2261-95	09/27/23 11:48 / jrj
Pseudo-critical Pressure, psia	547			1		GPA 2261-95	09/27/23 11:48 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	09/27/23 11:48 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	09/27/23 11:48 / jrj
Air, %	97.88			0.01		GPA 2261-95	09/27/23 11:48 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	09/27/23 11:48 / 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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Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B23092178-002
Client Sample ID: 2309C71-002B, Influent B

Report Date: 10/02/23
Collection Date: 09/20/23 09:55
DateReceived: 09/26/23
Matrix: Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	21.27	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Nitrogen	77.99	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Carbon Dioxide	0.70	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Methane	0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Hexanes plus	0.03	Mol %		0.01		GPA 2261-95	09/27/23 13:10 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
Hexanes plus	0.013	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
GPM Total	0.013	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
GPM Pentanes plus	0.013	gpm		0.001		GPA 2261-95	09/27/23 13:10 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	2			1		GPA 2261-95	09/27/23 13:10 / jrj
Net BTU per cu ft @ std cond. (LHV)	1			1		GPA 2261-95	09/27/23 13:10 / jrj
Pseudo-critical Pressure, psia	547			1		GPA 2261-95	09/27/23 13:10 / jrj
Pseudo-critical Temperature, deg R	241			1		GPA 2261-95	09/27/23 13:10 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	09/27/23 13:10 / jrj
Air, %	97.17			0.01		GPA 2261-95	09/27/23 13:10 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	09/27/23 13:10 / 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)

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** B23092178 **Report Date:** 10/02/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **GPA 2261-95**										Batch: R409565
Lab ID: **B23092155-001ADUP**	12	Sample Duplicate				Run: GCNGA-B_230927A				09/27/23 09:43
Oxygen		21.9	Mol %	0.01				0	20	
Nitrogen		78.1	Mol %	0.01				0	20	
Carbon Dioxide		0.05	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		<0.01	Mol %	0.01					20	
Lab ID: **LCS092723**	11	Laboratory Control Sample				Run: GCNGA-B_230927A				09/27/23 15:27
Oxygen		0.62	Mol %	0.01	124	70	130			
Nitrogen		6.02	Mol %	0.01	100	70	130			
Carbon Dioxide		1.00	Mol %	0.01	101	70	130			
Methane		74.3	Mol %	0.01	99	70	130			
Ethane		6.04	Mol %	0.01	101	70	130			
Propane		5.35	Mol %	0.01	108	70	130			
Isobutane		1.98	Mol %	0.01	99	70	130			
n-Butane		1.98	Mol %	0.01	99	70	130			
Isopentane		1.02	Mol %	0.01	102	70	130			
n-Pentane		1.00	Mol %	0.01	100	70	130			
Hexanes plus		0.73	Mol %	0.01	91	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

ENERGY LABORATORIES
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Work Order Receipt Checklist

Hall Environmental

B23092178

Login completed by:	Addison A. Gilbert	Date Received:	9/26/2023
Reviewed by:	darcy	Received by:	dnh
Reviewed Date:	9/30/2023	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:	17.4°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.

Contact and Corrective Action Comments:

None

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRATOR: **Energy Labs -Billings** COMPANY: **Energy Laboratories**		PHONE: **(406) 869-6253**	FAX: **(406) 252-6069**
ADDRESS: **1120 South 27th Street**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Billings, MT 59107**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2309C71-001B	Influent A	TEDLAR	Air	9/20/2023 9:40:00 AM	1	Natural Gas Analysis
2	2309C71-002B	Influent B	TEDLAR	Air	9/20/2023 9:55:00 AM	1	Natural Gas Analysis

~~B23092155~~
B23092178 AG 26Sep23

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: 9/22/2023	Time: 12:06 PM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 9/26/23	Time: 0800

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: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
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: Harvest | Work Order Number: 2309C71 | RcptNo: 1

Received By: Joseph Alderette 9/22/2023 7:35:00 AM

Completed By: Cheyenne Cason 9/22/2023 12:02:32 PM

Reviewed By: JH 9-22-23

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 9/22/23

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: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	NA	Good	Not Present	NA		

Chain-of-Custody Record

Client: Harvest

Attn: Monica Smith

Mailing Address:

Phone #:

email or Fax#: msmith@harvestmidstream.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: Trunk S

Project #:

Project Manager: Reece Hanson

Sampler: Reece Hanson

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp (Including CF): ~~5.4 + 0 = 5.4~~ NA 9-22-23 (°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. 2309C71	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)	VOC's 8260B	Fixed gas O_2 + CO_2
9/20/23	9:40	air	Influent A	2, Tedlar	-	001		X									X	X
9/20/23	9:55	↓	Influent B	↓	-	002		X									X	X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9/21/23	16:00			courier	9-22-23	7:35
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: cc: rhanson@ensolum.com

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 280714

CONDITIONS

Operator: Harvest Four Corners, LLC 1755 Arroyo Dr Bloomfield, NM 87413	OGRID: 373888
	Action Number: 280714
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 3Q2023 Solar SVE for Trunk S: Content Satisfactory 1. Continue to operate SVE system and conduct O&M as scheduled. 2. Continue to submit reports on a quarterly basis.	3/6/2024