

**REVIEWED**

By NVeletz at 7:21 am, Jan 16, 2025



**ENSOLUM**

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

December 19, 2024

**New Mexico Oil Conservation Division**

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

**Subject: 2024 Fourth 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 report summarizing the soil vapor extraction (SVE) system performance during the fourth quarter of 2024 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 system operation beginning on July 16, 2020, to remediate subsurface impacts to soil following a release on June 25, 2019. The release occurred from an underground natural gas pipeline leak 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. During initial response, approximately 2,000 cubic yards (yd<sup>3</sup>) of heavily impacted soil were excavated and transported off site for disposal. Due to the extent of the release, excavation was not the most practical approach for full remediation. Clean overburden, which had been segregated from impacted soil during excavation, was used as backfill after repairing the pipeline leak. A solar SVE system was installed to remediate residual soil impacts. Animas Environmental submitted a "Site Delineation and Preliminary Remediation Report" in 2020, which was approved by the NMOCD October 18, 2022. 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), installed at depths ranging from 30 to 50 feet below ground surface (bgs), plumbed to 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 applied. The wells were plumbed to a manifold and directed to before 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 as sun power increases throughout the day to maximize efficiency. 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 December 12, 2024, there have been 1,611 days of operation, with an estimated 18,563 total hours of nominal daylight available for solar SVE system operations. Since installation, the system had an actual runtime of approximately 19,158 hours, for an overall uptime of 103.2 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 from the monthly site visits 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**

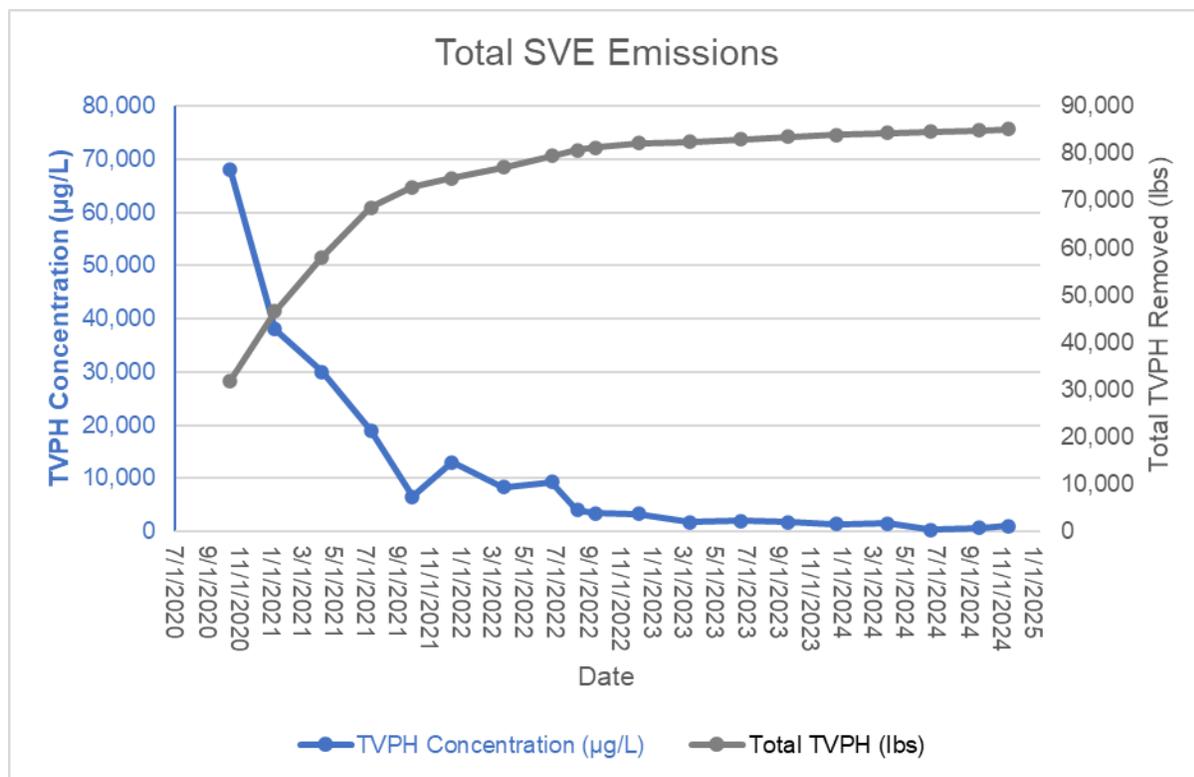
Time Period	Start up July 16, 2020 to September 20, 2024	September 21, 2024 to September 30, 2024	October 1, 2024 to October 31, 2024	November 1, 2024 to November 30, 2024	December 1, 2024 to December 12, 2024
Days	1,528	10	31	30	12
Avg. Nominal Daylight Hours	11.58	12	11	10	9
Available Runtime Hours	17,694	120	341	300	108

<b>Total Available Daylight Runtime Hours</b>	<b>18,563</b>
<b>Actual Runtime Hours</b>	<b>19,158</b>
<b>Cumulative % Runtime</b>	<b>103.2%</b>
<b>Quarterly Available Daylight Runtime Hours</b>	<b>869</b>
<b>Quarterly Runtime Hours</b>	<b>866</b>
<b>Quarterly % Runtime</b>	<b>99.7%</b>

**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 November 14, 2024 (Table 1). Samples were collected in 1-liter Tedlar® bags via a high vacuum air sampler and submitted to Eurofins Environmental Testing Laboratory (Eurofins) 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 8015M/D, and oxygen and carbon dioxide following Gas Processors Association Method 2261. The laboratory analytical report from the November 2024 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 85,090 pounds (lbs) (or 42.55 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. The Q4 2024 TVPH emissions rate was slightly higher than Q3, increasing from 0.17 pounds per hour (lbs/hr) to a rate of 0.24 lbs/hr (2.52 pounds per day).

**PLAN FOR NEXT QUARTER OF OPERATION**

During the upcoming first quarter 2025 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 first 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 use a hollow stem auger drill to redrill a borehole in the vicinity of borehole BH02 to conduct additional soil sampling between nine feet bgs and 41 feet bgs, where TPH concentrations exceeded 100 mg/kg in the June 2024 sampling event in order to investigate potential residual impacts and request closure if concentrations of benzene, toluene, ethylbenzene, xylenes (BTEX) and TPH 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.

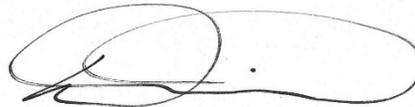
Ensolum appreciates the opportunity to provide this report to the NMOCD. If you have any questions or comments regarding this update, do not hesitate to contact Reece Hanson at (970) 210-9803 or via email at rhanson@ensolum.com or Monica Smith at (505) 632-4625 or at msmith@harvestmidstream.com.

Sincerely,

**ENSOLUM, LLC**



Reece Hanson  
Project Geologist



Daniel R. Moir, PG (licensed in WY & TX)  
Senior Managing Geologist

## APPENDICES

Figure 1 – Site Location Map

Figure 2 – SVE System Layout

Table 1 – Soil Vapor Extraction System Laboratory Analytical Results

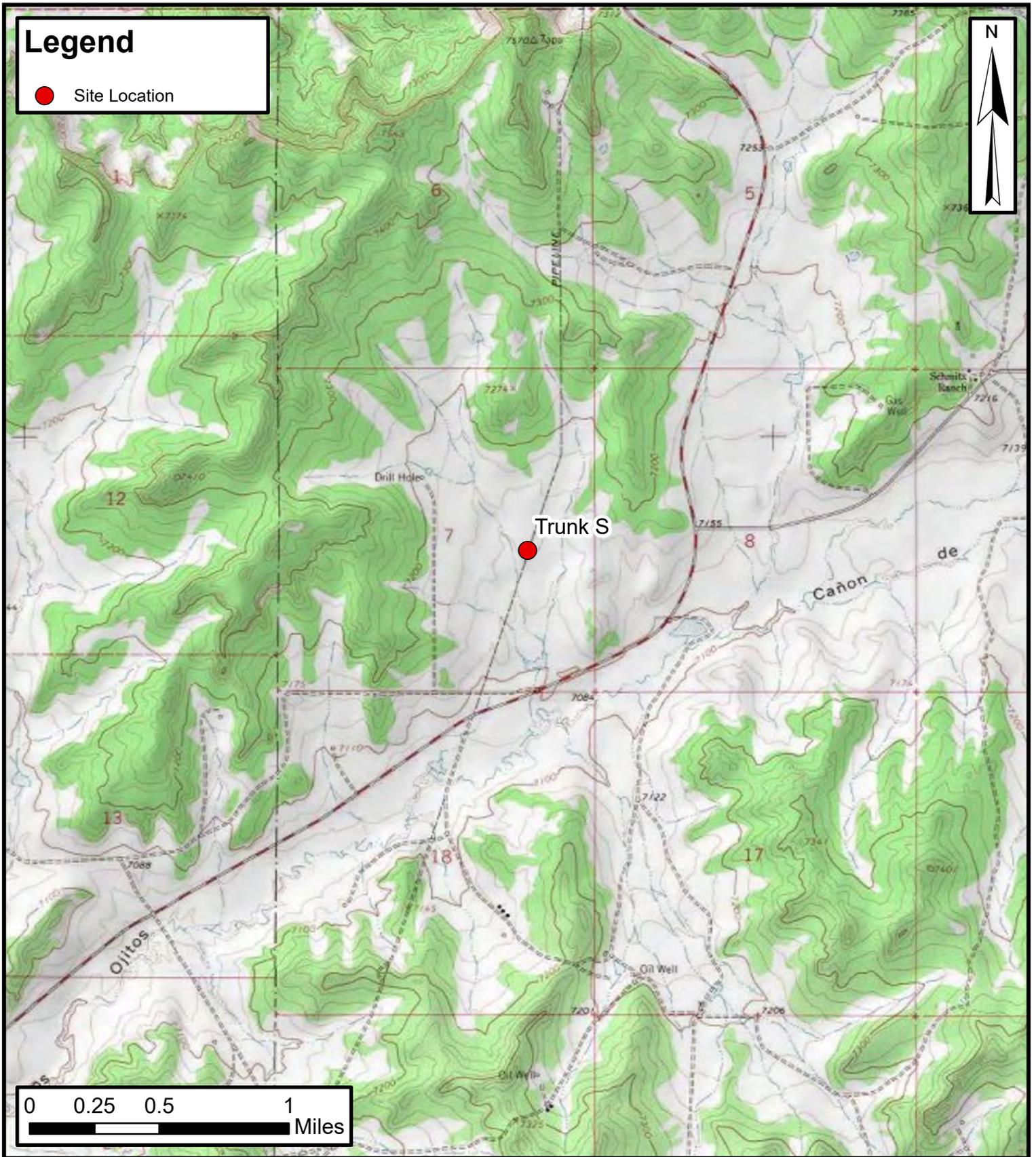
Table 2 – Soil Vapor Extraction System Mass Removal and Emissions

Appendix A – Photographic Log

Appendix B – Laboratory Analytical Report



FIGURES



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

**FIGURE**  
**1**



**SVE System Layout and Borehole Locations**  
Trunk S  
Harvest Four Corners, LLC  
36.41189°, -107.18085°  
Rio Arriba County, New Mexico

**FIGURE 2**



TABLES



**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
12/21/2023	325	0.9	9.8	2.0	28	1,400	21.54	0.50
3/28/2024	223	0.82	12	2.9	48	1,500	21.54	0.37
6/18/2024	858	<5.0	28	8.4	110	370	21.73	0.17
9/20/2024	309.8	<5.0	32	11	190	690	21.36	0.48
11/14/2024	NM	<1.0	3.5	1.3	22	1,000	19.09	0.54

**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



**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
12/21/2023	325	0.9	9.8	2.0	28	1,400
3/28/2024	223	0.82	12	2.9	48	1,500
6/18/2024	858	0.00	28	8.4	110	370
9/20/2024	309.8	0.00	32	11.0	190	690
11/14/2024	NM	0.00	3.5	1.3	22	1,000
<b>Average</b>	823	99	180	12	155	11,224



**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
12/21/2023	90	65,258,892	5,135,400	0.00	0.00	0.001	0.01	0.45
3/28/2024	77	69,888,132	4,629,240	0.00	0.00	0.001	0.01	0.45
6/18/2024	86	75,223,572	5,335,440	0.00	0.01	0.002	0.03	0.29
9/20/2024	87	82,103,700	6,880,128	0.00	0.01	0.003	0.05	0.17
12/12/2024	63	85,377,180	3,273,480	0.00	0.00	0.001	0.02	0.24
<b>Average</b>				0.04	0.07	0.00	0.05	4.08



**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
12/21/2023	14,944	951	0	4	1	10	426	0.2
3/28/2024	15,946	1,002	0	3	1	11	454	0.2
6/18/2024	16,980	1,034	0	7	2	26	295	0.1
9/20/2024	18,292	1,312	0	13	4	64	225	0.1
12/12/2024	19,158	866	0	4	1	22	206	0.1
<b>Total Mass Recovery to Date</b>			465	833	48	715	85,090	42.55

**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<sup>3</sup>) \* Air Flow Rates (cfm) \* (1 m<sup>3</sup>/35.3147 ft<sup>3</sup>) \* (1 lb/453,592 mg) \* Time Period (min)



## APPENDIX A

### Photographic Log

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Photo #1  
SVE Hours Reading 10/11/2024



Ensolum  
Harvest O&M Trunk S  
Hours  
10.11.2024 13:06  
36.41165, -107.18098  
Altitude: 2154m





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

Photo #2  
SVE Hours Reading 11/14/2024



Photo #2  
SVE Hours Reading 12/12/2024





## APPENDIX B

### Laboratory Analytical Report



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Monica Smith  
Harvest  
1755 Arroyo Dr.  
Bloomfield, New Mexico 87413

Generated 11/26/2024 1:44:41 PM

## JOB DESCRIPTION

Trunk S

## JOB NUMBER

885-15457-1

# 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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11/26/2024 1:44:41 PM

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

Client: Harvest  
Project/Site: Trunk S

Laboratory Job ID: 885-15457-1

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## Definitions/Glossary

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

## 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: Harvest  
Project: Trunk S

Job ID: 885-15457-1

**Job ID: 885-15457-1**

**Eurofins Albuquerque**

## Job Narrative 885-15457-1

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

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

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

### Receipt

The sample was received on 11/16/2024 6:20 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C.

### Subcontract Work

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

### GC/MS VOA

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

### Gasoline Range Organics

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

Eurofins Albuquerque



## Client Sample Results

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

Client Sample ID: Inf 11-14 Trunk S

Lab Sample ID: 885-15457-1

Date Collected: 11/14/24 12:20

Matrix: Air

Date Received: 11/16/24 06:20

Sample Container: Tedlar Bag 1L

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			11/20/24 13:52	10
1,1,1-Trichloroethane	ND		1.0	ug/L			11/20/24 13:52	10
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			11/20/24 13:52	10
1,1,2-Trichloroethane	ND		1.0	ug/L			11/20/24 13:52	10
1,1-Dichloroethane	ND		1.0	ug/L			11/20/24 13:52	10
1,1-Dichloroethene	ND		1.0	ug/L			11/20/24 13:52	10
1,1-Dichloropropene	ND		1.0	ug/L			11/20/24 13:52	10
1,2,3-Trichlorobenzene	ND		1.0	ug/L			11/20/24 13:52	10
1,2,3-Trichloropropane	ND		2.0	ug/L			11/20/24 13:52	10
1,2,4-Trichlorobenzene	ND		1.0	ug/L			11/20/24 13:52	10
<b>1,2,4-Trimethylbenzene</b>	<b>1.4</b>		1.0	ug/L			11/20/24 13:52	10
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			11/20/24 13:52	10
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			11/20/24 13:52	10
1,2-Dichlorobenzene	ND		1.0	ug/L			11/20/24 13:52	10
1,2-Dichloroethane (EDC)	ND		1.0	ug/L			11/20/24 13:52	10
1,2-Dichloropropane	ND		1.0	ug/L			11/20/24 13:52	10
<b>1,3,5-Trimethylbenzene</b>	<b>1.7</b>		1.0	ug/L			11/20/24 13:52	10
1,3-Dichlorobenzene	ND		1.0	ug/L			11/20/24 13:52	10
1,3-Dichloropropane	ND		1.0	ug/L			11/20/24 13:52	10
1,4-Dichlorobenzene	ND		1.0	ug/L			11/20/24 13:52	10
1-Methylnaphthalene	ND		4.0	ug/L			11/20/24 13:52	10
2,2-Dichloropropane	ND		2.0	ug/L			11/20/24 13:52	10
2-Butanone	ND		10	ug/L			11/20/24 13:52	10
2-Chlorotoluene	ND		1.0	ug/L			11/20/24 13:52	10
2-Hexanone	ND		10	ug/L			11/20/24 13:52	10
2-Methylnaphthalene	ND		4.0	ug/L			11/20/24 13:52	10
4-Chlorotoluene	ND		1.0	ug/L			11/20/24 13:52	10
4-Isopropyltoluene	ND		1.0	ug/L			11/20/24 13:52	10
4-Methyl-2-pentanone	ND		10	ug/L			11/20/24 13:52	10
Acetone	ND		10	ug/L			11/20/24 13:52	10
Benzene	ND		1.0	ug/L			11/20/24 13:52	10
Bromobenzene	ND		1.0	ug/L			11/20/24 13:52	10
Bromodichloromethane	ND		1.0	ug/L			11/20/24 13:52	10
Dibromochloromethane	ND		1.0	ug/L			11/20/24 13:52	10
Bromoform	ND		1.0	ug/L			11/20/24 13:52	10
Bromomethane	ND		3.0	ug/L			11/20/24 13:52	10
Carbon disulfide	ND		10	ug/L			11/20/24 13:52	10
Carbon tetrachloride	ND		1.0	ug/L			11/20/24 13:52	10
Chlorobenzene	ND		1.0	ug/L			11/20/24 13:52	10
Chloroethane	ND		2.0	ug/L			11/20/24 13:52	10
Chloroform	ND		1.0	ug/L			11/20/24 13:52	10
Chloromethane	ND		3.0	ug/L			11/20/24 13:52	10
cis-1,2-Dichloroethene	ND		1.0	ug/L			11/20/24 13:52	10
cis-1,3-Dichloropropene	ND		1.0	ug/L			11/20/24 13:52	10
Dibromomethane	ND		1.0	ug/L			11/20/24 13:52	10
Dichlorodifluoromethane	ND		1.0	ug/L			11/20/24 13:52	10
<b>Ethylbenzene</b>	<b>1.3</b>		1.0	ug/L			11/20/24 13:52	10
Hexachlorobutadiene	ND		1.0	ug/L			11/20/24 13:52	10

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## Client Sample Results

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

Client Sample ID: Inf 11-14 Trunk S

Lab Sample ID: 885-15457-1

Date Collected: 11/14/24 12:20

Matrix: Air

Date Received: 11/16/24 06:20

Sample Container: Tedlar Bag 1L

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	ug/L			11/20/24 13:52	10
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L			11/20/24 13:52	10
Methylene Chloride	ND		3.0	ug/L			11/20/24 13:52	10
n-Butylbenzene	ND		3.0	ug/L			11/20/24 13:52	10
N-Propylbenzene	ND		1.0	ug/L			11/20/24 13:52	10
Naphthalene	ND		2.0	ug/L			11/20/24 13:52	10
sec-Butylbenzene	ND		1.0	ug/L			11/20/24 13:52	10
Styrene	ND		1.0	ug/L			11/20/24 13:52	10
tert-Butylbenzene	ND		1.0	ug/L			11/20/24 13:52	10
Tetrachloroethene (PCE)	ND		1.0	ug/L			11/20/24 13:52	10
<b>Toluene</b>	<b>3.5</b>		1.0	ug/L			11/20/24 13:52	10
trans-1,2-Dichloroethene	ND		1.0	ug/L			11/20/24 13:52	10
trans-1,3-Dichloropropene	ND		1.0	ug/L			11/20/24 13:52	10
Trichloroethene (TCE)	ND		1.0	ug/L			11/20/24 13:52	10
Trichlorofluoromethane	ND		1.0	ug/L			11/20/24 13:52	10
Vinyl chloride	ND		1.0	ug/L			11/20/24 13:52	10
<b>Xylenes, Total</b>	<b>22</b>		1.5	ug/L			11/20/24 13:52	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 130		11/20/24 13:52	10
Toluene-d8 (Surr)	94		70 - 130		11/20/24 13:52	10
4-Bromofluorobenzene (Surr)	101		70 - 130		11/20/24 13:52	10
Dibromofluoromethane (Surr)	92		70 - 130		11/20/24 13:52	10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics [C6 - C10]</b>	<b>1000</b>		25	ug/L			11/18/24 12:55	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	182		15 - 412		11/18/24 12:55	5

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## QC Sample Results

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

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

Lab Sample ID: MB 885-16277/1005

Matrix: Air

Analysis Batch: 16277

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.10	ug/L			11/20/24 13:28	1
1,1,1-Trichloroethane	ND		0.10	ug/L			11/20/24 13:28	1
1,1,2,2-Tetrachloroethane	ND		0.20	ug/L			11/20/24 13:28	1
1,1,2-Trichloroethane	ND		0.10	ug/L			11/20/24 13:28	1
1,1-Dichloroethane	ND		0.10	ug/L			11/20/24 13:28	1
1,1-Dichloroethene	ND		0.10	ug/L			11/20/24 13:28	1
1,1-Dichloropropene	ND		0.10	ug/L			11/20/24 13:28	1
1,2,3-Trichlorobenzene	ND		0.10	ug/L			11/20/24 13:28	1
1,2,3-Trichloropropane	ND		0.20	ug/L			11/20/24 13:28	1
1,2,4-Trichlorobenzene	ND		0.10	ug/L			11/20/24 13:28	1
1,2,4-Trimethylbenzene	ND		0.10	ug/L			11/20/24 13:28	1
1,2-Dibromo-3-Chloropropane	ND		0.20	ug/L			11/20/24 13:28	1
1,2-Dibromoethane (EDB)	ND		0.10	ug/L			11/20/24 13:28	1
1,2-Dichlorobenzene	ND		0.10	ug/L			11/20/24 13:28	1
1,2-Dichloroethane (EDC)	ND		0.10	ug/L			11/20/24 13:28	1
1,2-Dichloropropane	ND		0.10	ug/L			11/20/24 13:28	1
1,3,5-Trimethylbenzene	ND		0.10	ug/L			11/20/24 13:28	1
1,3-Dichlorobenzene	ND		0.10	ug/L			11/20/24 13:28	1
1,3-Dichloropropane	ND		0.10	ug/L			11/20/24 13:28	1
1,4-Dichlorobenzene	ND		0.10	ug/L			11/20/24 13:28	1
1-Methylnaphthalene	ND		0.40	ug/L			11/20/24 13:28	1
2,2-Dichloropropane	ND		0.20	ug/L			11/20/24 13:28	1
2-Butanone	ND		1.0	ug/L			11/20/24 13:28	1
2-Chlorotoluene	ND		0.10	ug/L			11/20/24 13:28	1
2-Hexanone	ND		1.0	ug/L			11/20/24 13:28	1
2-Methylnaphthalene	ND		0.40	ug/L			11/20/24 13:28	1
4-Chlorotoluene	ND		0.10	ug/L			11/20/24 13:28	1
4-Isopropyltoluene	ND		0.10	ug/L			11/20/24 13:28	1
4-Methyl-2-pentanone	ND		1.0	ug/L			11/20/24 13:28	1
Acetone	ND		1.0	ug/L			11/20/24 13:28	1
Benzene	ND		0.10	ug/L			11/20/24 13:28	1
Bromobenzene	ND		0.10	ug/L			11/20/24 13:28	1
Bromodichloromethane	ND		0.10	ug/L			11/20/24 13:28	1
Dibromochloromethane	ND		0.10	ug/L			11/20/24 13:28	1
Bromoform	ND		0.10	ug/L			11/20/24 13:28	1
Bromomethane	ND		0.30	ug/L			11/20/24 13:28	1
Carbon disulfide	ND		1.0	ug/L			11/20/24 13:28	1
Carbon tetrachloride	ND		0.10	ug/L			11/20/24 13:28	1
Chlorobenzene	ND		0.10	ug/L			11/20/24 13:28	1
Chloroethane	ND		0.20	ug/L			11/20/24 13:28	1
Chloroform	ND		0.10	ug/L			11/20/24 13:28	1
Chloromethane	ND		0.30	ug/L			11/20/24 13:28	1
cis-1,2-Dichloroethene	ND		0.10	ug/L			11/20/24 13:28	1
cis-1,3-Dichloropropene	ND		0.10	ug/L			11/20/24 13:28	1
Dibromomethane	ND		0.10	ug/L			11/20/24 13:28	1
Dichlorodifluoromethane	ND		0.10	ug/L			11/20/24 13:28	1
Ethylbenzene	ND		0.10	ug/L			11/20/24 13:28	1
Hexachlorobutadiene	ND		0.10	ug/L			11/20/24 13:28	1

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## QC Sample Results

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

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

Lab Sample ID: MB 885-16277/1005

Matrix: Air

Analysis Batch: 16277

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.10	ug/L			11/20/24 13:28	1
Methyl-tert-butyl Ether (MTBE)	ND		0.10	ug/L			11/20/24 13:28	1
Methylene Chloride	ND		0.30	ug/L			11/20/24 13:28	1
n-Butylbenzene	ND		0.30	ug/L			11/20/24 13:28	1
N-Propylbenzene	ND		0.10	ug/L			11/20/24 13:28	1
Naphthalene	ND		0.20	ug/L			11/20/24 13:28	1
sec-Butylbenzene	ND		0.10	ug/L			11/20/24 13:28	1
Styrene	ND		0.10	ug/L			11/20/24 13:28	1
tert-Butylbenzene	ND		0.10	ug/L			11/20/24 13:28	1
Tetrachloroethene (PCE)	ND		0.10	ug/L			11/20/24 13:28	1
Toluene	ND		0.10	ug/L			11/20/24 13:28	1
trans-1,2-Dichloroethene	ND		0.10	ug/L			11/20/24 13:28	1
trans-1,3-Dichloropropene	ND		0.10	ug/L			11/20/24 13:28	1
Trichloroethene (TCE)	ND		0.10	ug/L			11/20/24 13:28	1
Trichlorofluoromethane	ND		0.10	ug/L			11/20/24 13:28	1
Vinyl chloride	ND		0.10	ug/L			11/20/24 13:28	1
Xylenes, Total	ND		0.15	ug/L			11/20/24 13:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		11/20/24 13:28	1
Toluene-d8 (Surr)	115		70 - 130		11/20/24 13:28	1
4-Bromofluorobenzene (Surr)	94		70 - 130		11/20/24 13:28	1
Dibromofluoromethane (Surr)	101		70 - 130		11/20/24 13:28	1

Lab Sample ID: MB 885-16277/5

Matrix: Air

Analysis Batch: 16277

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			11/20/24 13:28	1
1,1,1-Trichloroethane	ND		1.0	ug/L			11/20/24 13:28	1
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			11/20/24 13:28	1
1,1,2-Trichloroethane	ND		1.0	ug/L			11/20/24 13:28	1
1,1-Dichloroethane	ND		1.0	ug/L			11/20/24 13:28	1
1,1-Dichloroethene	ND		1.0	ug/L			11/20/24 13:28	1
1,1-Dichloropropene	ND		1.0	ug/L			11/20/24 13:28	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			11/20/24 13:28	1
1,2,3-Trichloropropane	ND		2.0	ug/L			11/20/24 13:28	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			11/20/24 13:28	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			11/20/24 13:28	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			11/20/24 13:28	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			11/20/24 13:28	1
1,2-Dichlorobenzene	ND		1.0	ug/L			11/20/24 13:28	1
1,2-Dichloroethane (EDC)	ND		1.0	ug/L			11/20/24 13:28	1
1,2-Dichloropropane	ND		1.0	ug/L			11/20/24 13:28	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			11/20/24 13:28	1
1,3-Dichlorobenzene	ND		1.0	ug/L			11/20/24 13:28	1
1,3-Dichloropropane	ND		1.0	ug/L			11/20/24 13:28	1

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## QC Sample Results

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

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

Lab Sample ID: MB 885-16277/5

Matrix: Air

Analysis Batch: 16277

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	ug/L			11/20/24 13:28	1
1-Methylnaphthalene	ND		4.0	ug/L			11/20/24 13:28	1
2,2-Dichloropropane	ND		2.0	ug/L			11/20/24 13:28	1
2-Butanone	ND		10	ug/L			11/20/24 13:28	1
2-Chlorotoluene	ND		1.0	ug/L			11/20/24 13:28	1
2-Hexanone	ND		10	ug/L			11/20/24 13:28	1
2-Methylnaphthalene	ND		4.0	ug/L			11/20/24 13:28	1
4-Chlorotoluene	ND		1.0	ug/L			11/20/24 13:28	1
4-Isopropyltoluene	ND		1.0	ug/L			11/20/24 13:28	1
4-Methyl-2-pentanone	ND		10	ug/L			11/20/24 13:28	1
Acetone	ND		10	ug/L			11/20/24 13:28	1
Benzene	ND		1.0	ug/L			11/20/24 13:28	1
Bromobenzene	ND		1.0	ug/L			11/20/24 13:28	1
Bromodichloromethane	ND		1.0	ug/L			11/20/24 13:28	1
Dibromochloromethane	ND		1.0	ug/L			11/20/24 13:28	1
Bromoform	ND		1.0	ug/L			11/20/24 13:28	1
Bromomethane	ND		3.0	ug/L			11/20/24 13:28	1
Carbon disulfide	ND		10	ug/L			11/20/24 13:28	1
Carbon tetrachloride	ND		1.0	ug/L			11/20/24 13:28	1
Chlorobenzene	ND		1.0	ug/L			11/20/24 13:28	1
Chloroethane	ND		2.0	ug/L			11/20/24 13:28	1
Chloroform	ND		1.0	ug/L			11/20/24 13:28	1
Chloromethane	ND		3.0	ug/L			11/20/24 13:28	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			11/20/24 13:28	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			11/20/24 13:28	1
Dibromomethane	ND		1.0	ug/L			11/20/24 13:28	1
Dichlorodifluoromethane	ND		1.0	ug/L			11/20/24 13:28	1
Ethylbenzene	ND		1.0	ug/L			11/20/24 13:28	1
Hexachlorobutadiene	ND		1.0	ug/L			11/20/24 13:28	1
Isopropylbenzene	ND		1.0	ug/L			11/20/24 13:28	1
Methyl-tert-butyl Ether (MTBE)	ND		1.0	ug/L			11/20/24 13:28	1
Methylene Chloride	ND		3.0	ug/L			11/20/24 13:28	1
n-Butylbenzene	ND		3.0	ug/L			11/20/24 13:28	1
N-Propylbenzene	ND		1.0	ug/L			11/20/24 13:28	1
Naphthalene	ND		2.0	ug/L			11/20/24 13:28	1
sec-Butylbenzene	ND		1.0	ug/L			11/20/24 13:28	1
Styrene	ND		1.0	ug/L			11/20/24 13:28	1
tert-Butylbenzene	ND		1.0	ug/L			11/20/24 13:28	1
Tetrachloroethene (PCE)	ND		1.0	ug/L			11/20/24 13:28	1
Toluene	ND		1.0	ug/L			11/20/24 13:28	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			11/20/24 13:28	1
trans-1,3-Dichloropropene	ND		1.0	ug/L			11/20/24 13:28	1
Trichloroethene (TCE)	ND		1.0	ug/L			11/20/24 13:28	1
Trichlorofluoromethane	ND		1.0	ug/L			11/20/24 13:28	1
Vinyl chloride	ND		1.0	ug/L			11/20/24 13:28	1
Xylenes, Total	ND		1.5	ug/L			11/20/24 13:28	1

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### QC Sample Results

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

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

Lab Sample ID: MB 885-16277/5  
Matrix: Air  
Analysis Batch: 16277

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		11/20/24 13:28	1
Toluene-d8 (Surr)	115		70 - 130		11/20/24 13:28	1
4-Bromofluorobenzene (Surr)	94		70 - 130		11/20/24 13:28	1
Dibromofluoromethane (Surr)	101		70 - 130		11/20/24 13:28	1

Lab Sample ID: LCS 885-16277/4  
Matrix: Air  
Analysis Batch: 16277

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	18.7		ug/L		93	70 - 130
Benzene	20.1	19.7		ug/L		98	70 - 130
Chlorobenzene	20.1	20.0		ug/L		100	70 - 130
Toluene	20.2	19.6		ug/L		97	70 - 130
Trichloroethene (TCE)	20.2	18.3		ug/L		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	82		70 - 130
Dibromofluoromethane (Surr)	98		70 - 130

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

Lab Sample ID: MB 885-16097/6  
Matrix: Air  
Analysis Batch: 16097

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	ug/L			11/18/24 11:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 412		11/18/24 11:32	1

Lab Sample ID: LCS 885-16097/4  
Matrix: Air  
Analysis Batch: 16097

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	50.0	48.0		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	204		15 - 412

Eurofins Albuquerque

# QC Association Summary

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

## GC/MS VOA

### Analysis Batch: 16277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-15457-1	Inf 11-14 Trunk S	Total/NA	Air	8260B	
MB 885-16277/1005	Method Blank	Total/NA	Air	8260B	
MB 885-16277/5	Method Blank	Total/NA	Air	8260B	
LCS 885-16277/4	Lab Control Sample	Total/NA	Air	8260B	

## GC VOA

### Analysis Batch: 16097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-15457-1	Inf 11-14 Trunk S	Total/NA	Air	8015M/D	
MB 885-16097/6	Method Blank	Total/NA	Air	8015M/D	
LCS 885-16097/4	Lab Control Sample	Total/NA	Air	8015M/D	

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# Lab Chronicle

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

**Client Sample ID: Inf 11-14 Trunk S**

**Lab Sample ID: 885-15457-1**

**Date Collected: 11/14/24 12:20**

**Matrix: Air**

**Date Received: 11/16/24 06:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		10	16277	CM	EET ALB	11/20/24 13:52
Total/NA	Analysis	8015M/D		5	16097	JP	EET ALB	11/18/24 12:55

**Laboratory References:**

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

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

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# Accreditation/Certification Summary

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

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

Eurofins Albuquerque

# Accreditation/Certification Summary

Client: Harvest  
Project/Site: Trunk S

Job ID: 885-15457-1

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

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

Eurofins Albuquerque

# Accreditation/Certification Summary

Client: Harvest  
 Project/Site: Trunk S

Job ID: 885-15457-1

## 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



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# ANALYTICAL SUMMARY REPORT

November 25, 2024

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

Work Order: B24111344 Quote ID: B15626

Project Name: Trunk S 88501083

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 11/19/2024 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B24111344-001	Inf 11-14 Trunk S (885-15457-1)	11/14/24 12:20	11/19/24	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 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

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





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### LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

**Client:** Hall Environmental  
**Project:** Trunk S 88501083  
**Lab ID:** B24111344-001  
**Client Sample ID:** Inf 11-14 Trunk S (885-15457-1)

**Report Date:** 11/25/24  
**Collection Date:** 11/14/24 12:20  
**Date Received:** 11/19/24  
**Matrix:** Air

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>GAS CHROMATOGRAPHY ANALYSIS REPORT</b>							
Oxygen	19.09	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Nitrogen	80.36	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Carbon Dioxide	0.54	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Hexanes plus	0.01	Mol %		0.01		GPA 2261-13	11/20/24 10:07 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj
Hexanes plus	0.004	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj
GPM Total	0.004	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj
GPM Pentanes plus	0.004	gpm		0.001		GPA 2261-13	11/20/24 10:07 / jrj

#### CALCULATED PROPERTIES

Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-13	11/20/24 10:07 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-13	11/20/24 10:07 / jrj
Pseudo-critical Pressure, psia	541			1		GPA 2261-13	11/20/24 10:07 / jrj
Pseudo-critical Temperature, deg R	239			1		GPA 2261-13	11/20/24 10:07 / jrj
Specific Gravity @ 60/60F	0.997			0.001		D3588-81	11/20/24 10:07 / jrj
Air, %	87.21			0.01		GPA 2261-13	11/20/24 10:07 / jrj
- The analysis was not corrected for air.							

#### COMMENTS

-							11/20/24 10:07 / jrj
- BTU, GPM, and specific gravity are corrected for deviation from ideal gas behavior. - GPM = gallons of liquid at standard conditions per 1000 cu. ft. of moisture free gas @ standard conditions. - To convert BTU to a water-saturated basis @ standard conditions, multiply by 0.9825. - Standard conditions: 60 F & 14.73 psi on a dry basis							

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

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



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# QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B24111344

Report Date: 11/25/24

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: GPA 2261-13</b>								Batch: R432776		
<b>Lab ID: B24111344-001ADUP</b>	12 Sample Duplicate				Run: GCNGA-B_241120A			11/20/24 10:56		
Oxygen		19.1	Mol %	0.01				0.1	20	
Nitrogen		80.4	Mol %	0.01				0	20	
Carbon Dioxide		0.54	Mol %	0.01				0.0	20	
Hydrogen Sulfide		<0.01	Mol %	0.01					20	
Methane		<0.01	Mol %	0.01					20	
Ethane		<0.01	Mol %	0.01					20	
Propane		<0.01	Mol %	0.01					20	
Isobutane		<0.01	Mol %	0.01					20	
n-Butane		<0.01	Mol %	0.01					20	
Isopentane		<0.01	Mol %	0.01					20	
n-Pentane		<0.01	Mol %	0.01					20	
Hexanes plus		0.01	Mol %	0.01				0.0	20	
<b>Lab ID: LCS112024</b>								11 Laboratory Control Sample		
								Run: GCNGA-B_241120A		
								11/20/24 01:30		
Oxygen		0.63	Mol %	0.01	126	70	130			
Nitrogen		6.29	Mol %	0.01	105	70	130			
Carbon Dioxide		0.98	Mol %	0.01	99	70	130			
Methane		74.4	Mol %	0.01	100	70	130			
Ethane		6.02	Mol %	0.01	100	70	130			
Propane		5.04	Mol %	0.01	102	70	130			
Isobutane		1.72	Mol %	0.01	86	70	130			
n-Butane		1.99	Mol %	0.01	99	70	130			
Isopentane		1.09	Mol %	0.01	109	70	130			
n-Pentane		1.00	Mol %	0.01	100	70	130			
Hexanes plus		0.80	Mol %	0.01	100	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

## B24111344

Login completed by: Danielle N. Harris

Date Received: 11/19/2024

Reviewed by: lleprorowse

Received by: SAY

Reviewed Date: 11/25/2024

Carrier name: FedEx NDA

- 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: 10.4°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.

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

### Contact and Corrective Action Comments:

None





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### Laboratory Certifications and Accreditations

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

	Agency	Number
<b>Billings, MT</b>    	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
USDA Soil Permit	P330-20-00170	
Washington	C1039	
<b>Casper, WY</b>  	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
Washington	C1012	
<b>Gillette, WY</b>	US EPA Region VIII	WY00006
<b>Helena, MT</b>	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



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**ICOC No:**  
885-2844

**Containers**

Count  
1

Container Type  
Tedlar Bag 1L

Preservative  
None



### Login Sample Receipt Checklist

Client: Harvest

Job Number: 885-15457-1

**Login Number: 15457**  
**List Number: 1**  
**Creator: Proctor, Nancy**

**List Source: Eurofins Albuquerque**

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 414093

**CONDITIONS**

Operator: Harvest Four Corners, LLC 1755 Arroyo Dr Bloomfield, NM 87413	OGRID: 373888
	Action Number: 414093
	Action Type: [REPORT] Alternative Remediation Report (C-141AR)

**CONDITIONS**

Created By	Condition	Condition Date
nvelez	SVE reviewed - 1. Continue O&M & sampling as stated in report. 2. Submit next quarterly report by April 15, 2025.	1/16/2025