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October 21, 2022

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

Subject: **2022 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 *2022 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 at the Harvest Trunk S natural gas pipeline located in Rio Arriba County, New Mexico (Figure 1) and consisted of ≥25 barrels (bbls) of condensate and 278.5 MCF of natural gas sourced from a subsurface pipeline leak. 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 soils and the excavation was backfilled with the stockpiled soils after repairing the pipeline leak. A solar SVE system was installed to remediate impacts resulting from the release. Reports summarizing remediation system operation for the 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 the 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 most recent site visit on September 15, 2022, there have been 792 days of operation, with an estimated 9,314 total hours of nominal daylight available for solar SVE system operations. Since installation, the system had an actual runtime of 9,648 hours, for an overall uptime of 103.6 percent (%) of the available runtime hours, according to the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service. A table showing SVE system runtime in comparison with nominal available daylight hours per month is provided below.

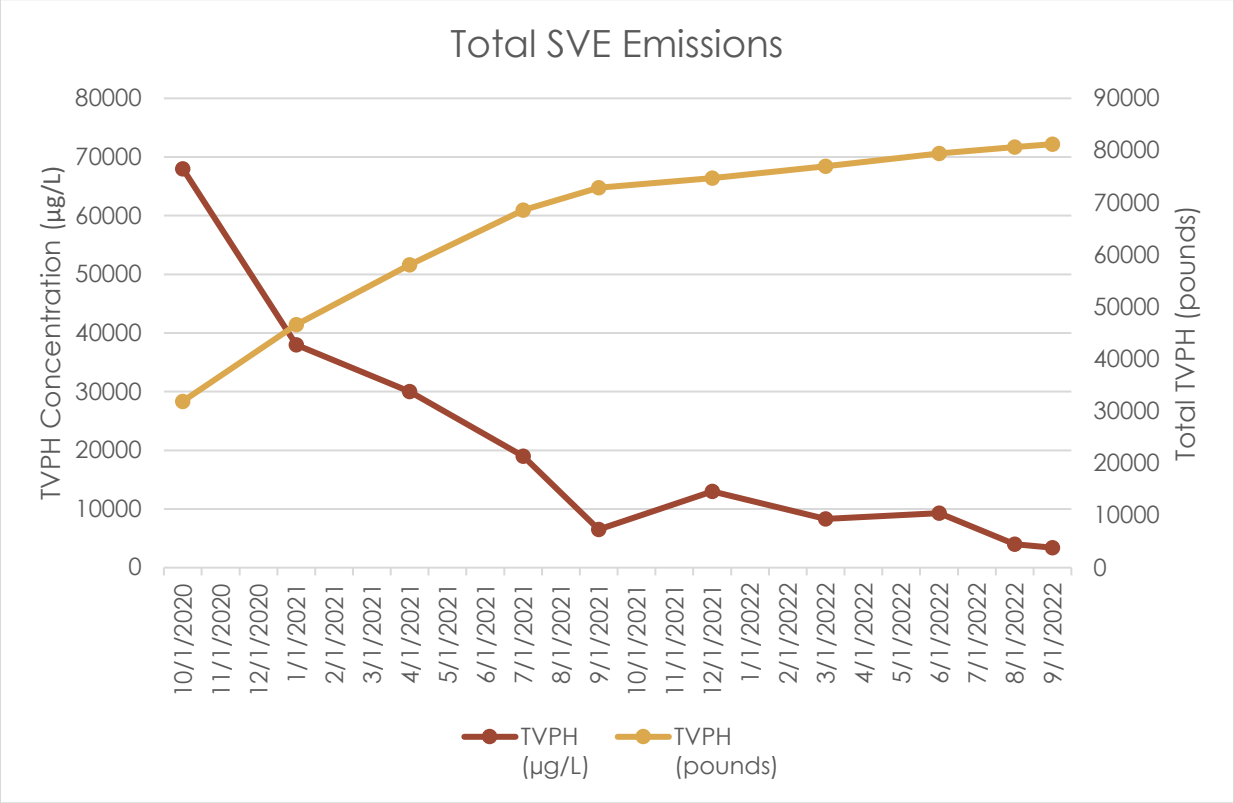
Time Period	Start up July 16, 2020 to June 23, 2022	June 24, 2022 to June 30, 2022	July 1, 2022 to July 31, 2022	August 1, 2022 to August 31, 2022	September 1, 2022, to September 15, 2022
Days	708	7	31	31	15
Avg. Nominal Daylight Hours	11.58	14	14	13	12
Available Runtime Hours	8,199	98	434	403	180

Total Available Daylight Runtime Hours	**9,314**
Actual Runtime Hours	**9,648**
Cumulative % Runtime	**103.6%**
Quarterly Available Daylight Runtime Hours	**1,115**
Quarterly Runtime Hours	**1,112**
Quarterly % Runtime	**99.7%**

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 15, 2022 (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) using United States Environmental Protection Agency (EPA) Method 8260B, total volatile petroleum hydrocarbons (TVPH) using EPA Method 8015, and oxygen and carbon dioxide by Gas Processors Association Method 2261.Air samples were collected in August and September due to one of the sample Tedlar® bags getting lost during shipping. Laboratory analytical reports from the August and September vapor sampling events are included as Appendix A.

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 81,211 pounds (lbs) of TVPH. Since system startup petroleum hydrocarbon emissions have steadily declined as shown in the chart below.



Despite the expected decrease in the mass removal rate over time, the September 2022 TVPH emissions rate remained at approximately 1.31 pounds per hour (lb/hr) or approximately 31.44 pounds per day (lb/day), indicating that the SVE system is still effectively remediating the Site.

PLAN FOR NEXT QUARTER OF OPERATION

During the upcoming fourth quarter 2022 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 using EPA Method 8260B, TVPH using EPA Method 8015, and oxygen and carbon dioxide by Gas Processors Association Method 2261. 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 that 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 standards defined in the New Mexico Administrative Code (NMAC) 19.15.29.12.

If the final delineation samples indicate hydrocarbon impact has been reduced to below NMAC 19.15.29.12 Table 1 Closure Criteria, Ensolum will present the confirmation laboratory analysis data in a report and request closure of the release. Should the results indicate that analytes in the soil exceed the Table 1 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 Jennifer Deal at (505) 324-5128 or at jdeal@harvestmidstream.com.

Sincerely,

ENSOLUM, LLC

Eric Carroll
Project Geologist

Danny Burns
Senior Geologist

APPENDICES

Figure 1 – Site Location Map
Figure 2 – SVE System Layout

Table 1 – Air Sample Analytical Results
Table 2 – Soil Vapor System Recovery & Emissions Summary

Appendix A – Project Photographs
Appendix B – Laboratory Analytical Reports

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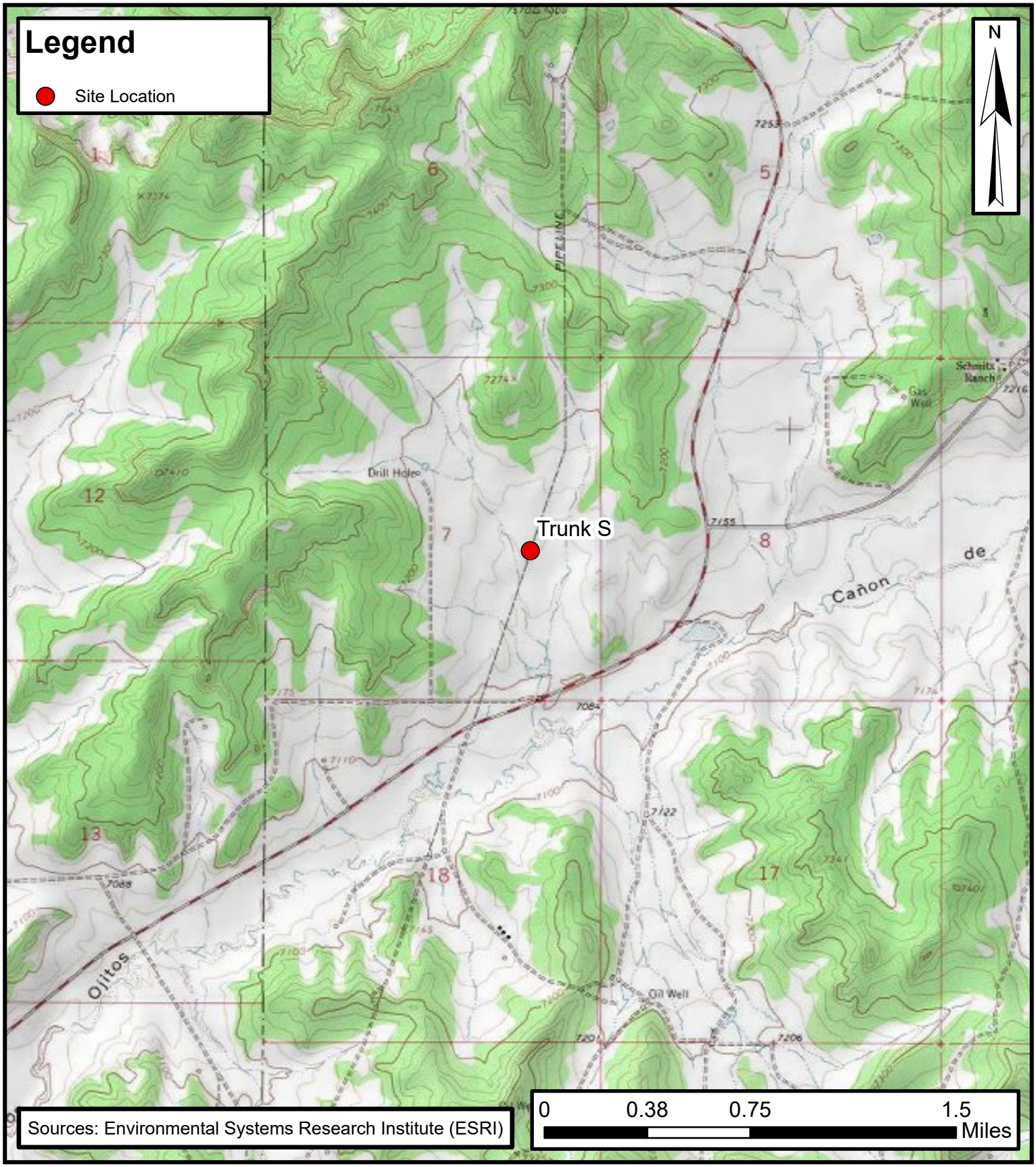
FIGURES



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Environmental & Hydrogeologic Consultants

Site Location Map

Trunk S
36.41189°N, -107.18085°W
Rio Arriba County, NM
Harvest Four Corners, LLC

FIGURE
#1

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Environmental & Hydrogeologic Consultants

SVE System Layout

Trunk S
36.41189°N, -107.18085°W
Rio Arriba County, NM
Harvest Four Corners, LLC

FIGURE
#2

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TABLES

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TABLE 1
SOIL VAPOR EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS
Harvest Midstream - Trunk S
Rio Arriba County, New Mexico

Ensolum Project No. 07B2002001

Original System Analytical Results

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	20.2	0.671
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	20.939	0.928
1/8/2021*	786	76	310	9.1	150	38,000	20.810	0.880
4/9/2021*	898	50	160	8.2	140	30,000	21.541	0.485
7/12/2021*	859	33	150	12	210	19,000	21.465	0.491
9/29/2020*	561	15	77	5.3	85	6,500	21.567	0.536
12/14/2021*	NM	22	140	10	170	13,000	21.828	0.404
3/23/2022*	545	17	90	7.9	130	8,300	21.949	0.346
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	NS	NS
9/15/2022	487	5.7	37	4.6	59	3,400	20.91	0.66

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
Harvest Four Corners - Trunk S
Rio Arriba County, New Mexico

Ensolum Project No. 07B2002001

Flow and 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
Average	1,078	167	291	17	220	19,950

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	0.560	0.52	0.010	0.17	--
9/3/2020	86	5,007,720	3,307,560	0.281	0.29	0.008	0.12	--
9/30/2020	87	6,756,420	1,748,700	0.015	0.11	0.018	0.16	--
10/14/2020	86	7,540,740	784,320	0.032	0.15	0.016	0.17	22.00
1/8/2021	94	12,193,740	4,653,000	0.040	0.14	0.004	0.07	17.84
4/9/2021	92	17,553,660	5,359,920	0.022	0.08	0.003	0.05	11.83
7/12/2021	85	24,127,560	6,573,900	0.013	0.05	0.003	0.06	8.11
9/29/2021	92	29,730,360	5,602,800	0.008	0.04	0.003	0.05	4.22
12/14/2021	42	31,650,600	1,920,240	0.003	0.02	0.001	0.02	2.44
3/23/2022	74	36,077,280	4,426,680	0.005	0.03	0.002	0.04	2.31
6/23/2022	47.6	39,581,592	3,504,312	0.002	0.01	0.001	0.02	2.00
8/11/2022	93	43,331,352	3,749,760	0.002	0.02	0.002	0.02	1.75
9/15/2022	97	45,892,152	2,560,800	0.002	0.02	0.002	0.02	1.31
			Average	0.08	0.11	0.01	0.08	7

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

Ensolum Project No. 07B2002001

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
Total Mass Recovery to Date			462	782	37	546	81,211	41

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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APPENDIX A

Project Photographs

PROJECT PHOTOGRAPHS
Trunk S
Rio Arriba County, New Mexico
Harvest Midstream Company

Photograph 1 Runtime meter taken on August 11, 2022, at 13:00. Hours = 9,209	
Photograph 2 Solar SVE system setup, taken on August 11, 2022, at 13:00.	

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

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APPENDIX B

Laboratory Analytical Reports

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

September 22, 2022

Danny Burns

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

RE: Trunk S SVE OrderNo.: 2208881

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/13/2022 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

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

Case Narrative

WO#: **2208881**
Date: **9/22/2022**

CLIENT: Harvest
Project: Trunk S SVE

Analytical Notes Regarding the Fixed Gases test:
The air bag was sent to the sub lab on 8/15. The sub lab never received the cooler and FedEx has not been able to locate the cooler. This test has been cancelled.

Analytical Report
Lab Order **2208881**
Date Reported: **9/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent 8-11-22
Project: Trunk S SVE
Collection Date: 8/11/2022 1:45:00 PM
Lab ID: 2208881-001 **Matrix:** AIR
Received Date: 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	4000	250		µg/L	50	8/13/2022 3:11:00 PM	G90248
Surr: BFB	95.3	70-130		%Rec	50	8/13/2022 3:11:00 PM	G90248
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	6.4	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Toluene	48	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Ethylbenzene	5.5	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2,4-Trimethylbenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,3,5-Trimethylbenzene	5.2	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Naphthalene	ND	10		µg/L	50	8/13/2022 3:11:00 PM	R90248
1-Methylnaphthalene	ND	20		µg/L	50	8/13/2022 3:11:00 PM	R90248
2-Methylnaphthalene	ND	20		µg/L	50	8/13/2022 3:11:00 PM	R90248
Acetone	ND	50		µg/L	50	8/13/2022 3:11:00 PM	R90248
Bromobenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Bromodichloromethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Bromoform	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Bromomethane	ND	10		µg/L	50	8/13/2022 3:11:00 PM	R90248
2-Butanone	ND	50		µg/L	50	8/13/2022 3:11:00 PM	R90248
Carbon disulfide	ND	50		µg/L	50	8/13/2022 3:11:00 PM	R90248
Carbon tetrachloride	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Chlorobenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Chloroethane	ND	10		µg/L	50	8/13/2022 3:11:00 PM	R90248
Chloroform	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Chloromethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
2-Chlorotoluene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
4-Chlorotoluene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
cis-1,2-DCE	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
cis-1,3-Dichloropropene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2-Dibromo-3-chloropropane	ND	10		µg/L	50	8/13/2022 3:11:00 PM	R90248
Dibromochloromethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Dibromomethane	ND	10		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2-Dichlorobenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,3-Dichlorobenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,4-Dichlorobenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Dichlorodifluoromethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,1-Dichloroethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,1-Dichloroethene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248

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	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 range due to dilution or matrix interference		

Analytical Report
Lab Order **2208881**
Date Reported: **9/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent 8-11-22
Project: Trunk S SVE
Collection Date: 8/11/2022 1:45:00 PM
Lab ID: 2208881-001 **Matrix:** AIR **Received Date:** 8/13/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,3-Dichloropropane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
2,2-Dichloropropane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,1-Dichloropropene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Hexachlorobutadiene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
2-Hexanone	ND	50		µg/L	50	8/13/2022 3:11:00 PM	R90248
Isopropylbenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
4-Isopropyltoluene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
4-Methyl-2-pentanone	ND	50		µg/L	50	8/13/2022 3:11:00 PM	R90248
Methylene chloride	ND	15		µg/L	50	8/13/2022 3:11:00 PM	R90248
n-Butylbenzene	ND	15		µg/L	50	8/13/2022 3:11:00 PM	R90248
n-Propylbenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
sec-Butylbenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Styrene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
tert-Butylbenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Tetrachloroethene (PCE)	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
trans-1,2-DCE	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
trans-1,3-Dichloropropene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2,3-Trichlorobenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2,4-Trichlorobenzene	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,1,1-Trichloroethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,1,2-Trichloroethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Trichloroethene (TCE)	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Trichlorofluoromethane	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
1,2,3-Trichloropropane	ND	10		µg/L	50	8/13/2022 3:11:00 PM	R90248
Vinyl chloride	ND	5.0		µg/L	50	8/13/2022 3:11:00 PM	R90248
Xylenes, Total	78	7.5		µg/L	50	8/13/2022 3:11:00 PM	R90248
Surr: Dibromofluoromethane	98.0	70-130		%Rec	50	8/13/2022 3:11:00 PM	R90248
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	50	8/13/2022 3:11:00 PM	R90248
Surr: Toluene-d8	101	70-130		%Rec	50	8/13/2022 3:11:00 PM	R90248
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	50	8/13/2022 3:11:00 PM	R90248

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	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 range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208881**

22-Sep-22

Client: Harvest

Project: Trunk S SVE

Sample ID: **2208881-001adup**	SampType: **DUP**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **Influent 8-11-22**	Batch ID: **R90248**	RunNo: **90248**
Prep Date:	Analysis Date: **8/13/2022**	SeqNo: **3221633** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	6.0	5.0						7.07	20	
Toluene	44	5.0						8.07	20	
Ethylbenzene	5.2	5.0						7.12	20	
Methyl tert-butyl ether (MTBE)	ND	5.0						0	20	
1,2,4-Trimethylbenzene	ND	5.0						0	20	
1,3,5-Trimethylbenzene	5.1	5.0						1.36	20	
1,2-Dichloroethane (EDC)	ND	5.0						0	20	
1,2-Dibromoethane (EDB)	ND	5.0						0	20	
Naphthalene	ND	10						0	20	
1-Methylnaphthalene	ND	20						0	20	
2-Methylnaphthalene	ND	20						0	20	
Acetone	ND	50						0	20	
Bromobenzene	ND	5.0						0	20	
Bromodichloromethane	ND	5.0						0	20	
Bromoform	ND	5.0						0	20	
Bromomethane	ND	10						0	20	
2-Butanone	ND	50						0	20	
Carbon disulfide	ND	50						0	20	
Carbon tetrachloride	ND	5.0						0	20	
Chlorobenzene	ND	5.0						0	20	
Chloroethane	ND	10						0	20	
Chloroform	ND	5.0						0	20	
Chloromethane	ND	5.0						0	20	
2-Chlorotoluene	ND	5.0						0	20	
4-Chlorotoluene	ND	5.0						0	20	
cis-1,2-DCE	ND	5.0						0	20	
cis-1,3-Dichloropropene	ND	5.0						0	20	
1,2-Dibromo-3-chloropropane	ND	10						0	20	
Dibromochloromethane	ND	5.0						0	20	
Dibromomethane	ND	10						0	20	
1,2-Dichlorobenzene	ND	5.0						0	20	
1,3-Dichlorobenzene	ND	5.0						0	20	
1,4-Dichlorobenzene	ND	5.0						0	20	
Dichlorodifluoromethane	ND	5.0						0	20	
1,1-Dichloroethane	ND	5.0						0	20	
1,1-Dichloroethene	ND	5.0						0	20	
1,2-Dichloropropane	ND	5.0						0	20	
1,3-Dichloropropane	ND	5.0						0	20	
2,2-Dichloropropane	ND	5.0						0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208881**

22-Sep-22

Client: Harvest

Project: Trunk S SVE

Sample ID: **2208881-001adup**	SampType: **DUP**	TestCode: **EPA Method 8260B: Volatiles**
Client ID: **Influent 8-11-22**	Batch ID: **R90248**	RunNo: **90248**
Prep Date:	Analysis Date: **8/13/2022**	SeqNo: **3221633** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	5.0						0	20	
Hexachlorobutadiene	ND	5.0						0	20	
2-Hexanone	ND	50						0	20	
Isopropylbenzene	ND	5.0						0	20	
4-Isopropyltoluene	ND	5.0						0	20	
4-Methyl-2-pentanone	ND	50						0	20	
Methylene chloride	ND	15						0	20	
n-Butylbenzene	ND	15						0	20	
n-Propylbenzene	ND	5.0						0	20	
sec-Butylbenzene	ND	5.0						0	20	
Styrene	ND	5.0						0	20	
tert-Butylbenzene	ND	5.0						0	20	
1,1,1,2-Tetrachloroethane	ND	5.0						0	20	
1,1,2,2-Tetrachloroethane	ND	5.0						0	20	
Tetrachloroethene (PCE)	ND	5.0						0	20	
trans-1,2-DCE	ND	5.0						0	20	
trans-1,3-Dichloropropene	ND	5.0						0	20	
1,2,3-Trichlorobenzene	ND	5.0						0	20	
1,2,4-Trichlorobenzene	ND	5.0						0	20	
1,1,1-Trichloroethane	ND	5.0						0	20	
1,1,2-Trichloroethane	ND	5.0						0	20	
Trichloroethene (TCE)	ND	5.0						0	20	
Trichlorofluoromethane	ND	5.0						0	20	
1,2,3-Trichloropropane	ND	10						0	20	
Vinyl chloride	ND	5.0						0	20	
Xylenes, Total	74	7.5						4.50	20	
Surr: Dibromofluoromethane	50		50.00		101	70	130	0	0	
Surr: 1,2-Dichloroethane-d4	51		50.00		103	70	130	0	0	
Surr: Toluene-d8	49		50.00		97.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	52		50.00		105	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2208881**

22-Sep-22

Client: Harvest

Project: Trunk S SVE

Sample ID: **2208881-001adup**	SampType: **DUP**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **Influent 8-11-22**	Batch ID: **G90248**	RunNo: **90248**
Prep Date:	Analysis Date: **8/13/2022**	SeqNo: **3221638** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3700	250						6.97	20	
Surr: BFB	47000		50000		94.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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: 2208881 RcptNo: 1

Received By: Juan Rojas 8/13/2022 7:40:00 AM

Completed By: Tracy Casarrubias 8/13/2022 11:11:15 AM

Reviewed By: TMC 8/13/22

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: JM 8/13/22

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	Yes			

Chain-of-Custody Record

Client: Harvest Midstream

Mailing Address:

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Trunk S SVE

Project #:

Project Manager: Danny Burns

Sampler: DB

On Ice: ☐ Yes ☐ No

Sample Temperature: N/A

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 Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) Full list	8270 (Semi-VOA)	Fixed Gas O_2 & CO_2			Air Bubbles (Y or N)
8-11-22	1345	Air	Influent 8-11-22	2-Tedlar	—	2208881 001			X							X		X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-12-22	1617			8/12/22	1617
8/12/22	1811			8/13/22	7:40

Remarks: cc: ecarroll dburns bherb

Fixed gases air bag was lost during shipping. 8/12/22 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.

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

September 23, 2022

Danny Burns

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

RE: Trunk S OrderNo.: 2209890

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/17/2022 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 **2209890**
Date Reported: **9/23/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent 091522
Project: Trunk S
Collection Date: 9/15/2022 1:00:00 PM
Lab ID: 2209890-001 **Matrix:** AIR
Received Date: 9/17/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	3400	25		µg/L	5	9/19/2022 5:47:00 PM	R91127
Surr: BFB	87.2	70-130		%Rec	5	9/19/2022 5:47:00 PM	R91127
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	5.7	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Toluene	37	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Ethylbenzene	4.6	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Methyl tert-butyl ether (MTBE)	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2,4-Trimethylbenzene	2.9	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,3,5-Trimethylbenzene	3.9	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2-Dichloroethane (EDC)	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2-Dibromoethane (EDB)	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Naphthalene	ND	1.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
1-Methylnaphthalene	ND	2.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
2-Methylnaphthalene	ND	2.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Acetone	ND	5.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Bromobenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Bromodichloromethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Bromoform	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Bromomethane	ND	1.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
2-Butanone	ND	5.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Carbon disulfide	ND	5.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Carbon tetrachloride	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Chlorobenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Chloroethane	ND	1.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Chloroform	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Chloromethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
2-Chlorotoluene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
4-Chlorotoluene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
cis-1,2-DCE	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
cis-1,3-Dichloropropene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2-Dibromo-3-chloropropane	ND	1.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Dibromochloromethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Dibromomethane	ND	1.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2-Dichlorobenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,3-Dichlorobenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,4-Dichlorobenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Dichlorodifluoromethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,1-Dichloroethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,1-Dichloroethene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127

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	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 range due to dilution or matrix interference		

Analytical Report
Lab Order **2209890**
Date Reported: **9/23/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Influent 091522
Project: Trunk S
Collection Date: 9/15/2022 1:00:00 PM
Lab ID: 2209890-001 **Matrix:** AIR **Received Date:** 9/17/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,3-Dichloropropane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
2,2-Dichloropropane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,1-Dichloropropene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Hexachlorobutadiene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
2-Hexanone	ND	5.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Isopropylbenzene	0.70	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
4-Isopropyltoluene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
4-Methyl-2-pentanone	ND	5.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Methylene chloride	ND	1.5		µg/L	5	9/19/2022 5:47:00 PM	R91127
n-Butylbenzene	ND	1.5		µg/L	5	9/19/2022 5:47:00 PM	R91127
n-Propylbenzene	1.1	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
sec-Butylbenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Styrene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
tert-Butylbenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Tetrachloroethene (PCE)	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
trans-1,2-DCE	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
trans-1,3-Dichloropropene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2,3-Trichlorobenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2,4-Trichlorobenzene	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,1,1-Trichloroethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,1,2-Trichloroethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Trichloroethene (TCE)	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Trichlorofluoromethane	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
1,2,3-Trichloropropane	ND	1.0		µg/L	5	9/19/2022 5:47:00 PM	R91127
Vinyl chloride	ND	0.50		µg/L	5	9/19/2022 5:47:00 PM	R91127
Xylenes, Total	59	0.75		µg/L	5	9/19/2022 5:47:00 PM	R91127
Surr: Dibromofluoromethane	94.2	70-130		%Rec	5	9/19/2022 5:47:00 PM	R91127
Surr: 1,2-Dichloroethane-d4	77.6	70-130		%Rec	5	9/19/2022 5:47:00 PM	R91127
Surr: Toluene-d8	119	70-130		%Rec	5	9/19/2022 5:47:00 PM	R91127
Surr: 4-Bromofluorobenzene	90.8	70-130		%Rec	5	9/19/2022 5:47:00 PM	R91127

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	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 range due to dilution or matrix interference		

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ANALYTICAL SUMMARY REPORT

September 23, 2022

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

Work Order: B22091706

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 9/20/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B22091706-001	2209890-001B, Influent 091522	09/15/22 13:00	09/20/22	Gas	Air Correction Calculations Appearance and Comments Calculated Properties GPM @ std cond,/1000 cu. ft., moist. Free Natural Gas Analysis Specific Gravity @ 60/60

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

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

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

Report Approved By:

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B22091706-001
Client Sample ID: 2209890-001B, Influent 091522

Report Date: 09/23/22
Collection Date: 09/15/22 13:00
DateReceived: 09/20/22
Matrix: Gas

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
GAS CHROMATOGRAPHY ANALYSIS REPORT							
Oxygen	20.91	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Nitrogen	78.43	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Carbon Dioxide	0.66	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Hydrogen Sulfide	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Methane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Ethane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Propane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Isobutane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
n-Butane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Isopentane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
n-Pentane	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Hexanes plus	<0.01	Mol %		0.01		GPA 2261-95	09/20/22 16:06 / jrj
Propane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
Isobutane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
n-Butane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
Isopentane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
n-Pentane	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
Hexanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
GPM Total	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
GPM Pentanes plus	< 0.001	gpm		0.001		GPA 2261-95	09/20/22 16:06 / jrj
CALCULATED PROPERTIES							
Gross BTU per cu ft @ Std Cond. (HHV)	ND			1		GPA 2261-95	09/20/22 16:06 / jrj
Net BTU per cu ft @ std cond. (LHV)	ND			1		GPA 2261-95	09/20/22 16:06 / jrj
Pseudo-critical Pressure, psia	546			1		GPA 2261-95	09/20/22 16:06 / jrj
Pseudo-critical Temperature, deg R	240			1		GPA 2261-95	09/20/22 16:06 / jrj
Specific Gravity @ 60/60F	1.00			0.001		D3588-81	09/20/22 16:06 / jrj
Air, %	95.53			0.01		GPA 2261-95	09/20/22 16:06 / jrj
- The analysis was not corrected for air.							
COMMENTS							
-						-	09/20/22 16:06 / jrj

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

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

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental **Work Order:** B22091706 **Report Date:** 09/23/22

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **GPA 2261-95**										Batch: R388187
Lab ID: **B22091527-002ADUP**	12	Sample Duplicate				Run: GCNGA-B_220920A				09/20/22 10:57
Oxygen		20.3	Mol %	0.01				0	20	
Nitrogen		78.0	Mol %	0.01				0.0	20	
Carbon Dioxide		1.74	Mol %	0.01				0.6	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: **LCS092022**	11	Laboratory Control Sample				Run: GCNGA-B_220920A				09/20/22 12:51
Oxygen		0.63	Mol %	0.01	126	70	130			
Nitrogen		6.13	Mol %	0.01	102	70	130			
Carbon Dioxide		1.01	Mol %	0.01	102	70	130			
Methane		74.0	Mol %	0.01	99	70	130			
Ethane		6.11	Mol %	0.01	102	70	130			
Propane		5.18	Mol %	0.01	105	70	130			
Isobutane		2.05	Mol %	0.01	102	70	130			
n-Butane		2.04	Mol %	0.01	102	70	130			
Isopentane		1.03	Mol %	0.01	103	70	130			
n-Pentane		1.03	Mol %	0.01	103	70	130			
Hexanes plus		0.81	Mol %	0.01	101	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

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Work Order Receipt Checklist

Hall Environmental

B22091706

Login completed by: Leslie S. Cadreau
Date Received: 9/20/2022

Reviewed by:
Received by: lrs

Reviewed Date:
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:	19.2°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

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

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

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

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	2209890-001B	Influent 091522	TEDLAR	Air	9/15/2022 1:00:00 PM	1	Natural Gases O2, CO2 *RUSH 5 DAY TAT* B220917060

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: 9/19/2022	Time: 9:47 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 9/20/22	Time: 9:15

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: **2209890** RcptNo: **1**

Received By: **Juan Rojas** **9/17/2022 7:45:00 AM**

Completed By: **Cheyenne Cason** **9/19/2022 9:42:20 AM**

Reviewed By: 9-19-22

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: JM 9/19/22

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	Yes			

Chain-of-Custody Record

Client: Harvest Four Corners
Oakley Hayes
Mailing Address:

Phone #:
email or Fax#: OHayes@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: Danny Burns - Ensolum
Sampler: E. Carroll
On Ice: ☐ Yes ☒ No 9/17/22
# of Coolers: 1
Cooler Temp(including CF): N/A (°C)

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2209890	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)	Fixed Gas 02/C02					
9-15	1300	Air	Influent 9-15-22	2 Tedlar	NA	001		X						X			X					

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
9-16	14:15	Eric Carroll			9/16/22	1415
9/16/22	1840	Grant Work		courier	9/17/22	7:45

Remarks:
cc: dburns@ensolum.com
ecarroll@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 154975

CONDITIONS

Operator: Harvest Four Corners, LLC 1755 Arroyo Dr Bloomfield, NM 87413	OGRID: 373888
	Action Number: 154975
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. Please see App ID 129947 for most updated status.	5/5/2023