

Accepted - 07/05/2024



July 21, 2023

New Mexico Oil Conservation Division – District III New Mexico Energy, Mineral, and Natural Resources Department 1000 Rio Brazos Road Aztec, New Mexico 87410

Subject: 2023 Second Quarter – Solar SVE System Update Trunk L Tank Battery Harvest Four Corners, LLC Incident Number NVF1900731813 Remediation Permit Number 3RP-13665 Rio Arriba County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Harvest Four Corners, LLC (Harvest), presents the following *2023 Second Quarter – Solar SVE System Update* report summarizing the soil vapor extraction (SVE) system performance at the Trunk L Tank Battery (Site), located in Unit A of Section 28, Township 28 North, Range 05 West, in Rio Arriba County, New Mexico (Figure 1).

BACKGROUND

The solar SVE system was installed on September 18, 2019, to remediate subsurface impacts following a release on December 14, 2018. Excessive liquids were released onto the Site during a pigging event. Additionally, the volume of fluid in the slug catcher was elevated due to a stuck float valve, causing a release of approximately 22 barrels (bbls) into the lined secondary containment. Harvest reported the release to the New Mexico Oil Conservation Division (NMOCD) on a release Notification and Corrective Action Form C-141 on December 28, 2018, and the event was assigned Incident Number NVF1900731813. 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 consists of three shallow wells (SVE01, SVE03, and SVE05) with depths ranging from 15 feet below ground surface (bgs) to 20 feet bgs with ten feet of screened interval, and three deep wells (SVE02, SVE04 and SVE06) with depths ranging from 35 feet bgs to 40 feet bgs with ten feet of screened interval. The solar SVE system is comprised of a 2.75 horsepower, three-phase blower capable of extracting 105 cubic feet per minute (cfm) at 50 inches of water column (IWC) vacuum, with a maximum vacuum capability of 84 IWC. 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 water 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-

Harvest Four Corners, LLC Trunk L Tank Battery

grid locations and operates autonomously. The layout of the solar SVE system is depicted on Figure 2.

Between startup of the solar SVE system on September 18, 2019, and the last quarterly site visit on June 16, 2023, there have been 1,367 days of operation, with an estimated 15,949 total hours of nominal daylight available for solar SVE system operations. A photographic log of the hours meter reading is included as Appendix A. Since installation, the system had an actual runtime of 16,360 hours, for an overall uptime of 102.6 percent (%) of the available runtime hours. Below is a table showing SVE system runtime in comparison with nominal available daylight hours per month, according to the National Renewable Energy Laboratory (NREL).

Time Period	Start up on September 18, 2019 to March 28, 2023	March 29, 2023, to March 31, 2023	April 1, 2023, to April 30, 2023	May 1, 2023, to May 31, 2023	June 1, 2023, to June 16, 2023
Days	1,287	3	30	31	16
Avg. Nominal Daylight Hours	11.6	11	12	13	14
Available Runtime Hours	14,929	33	360	403	224

- Total Available Daylight Runtime Hours 15,949
 - Actual Runtime Hours 16,360
 - Cumulative % Runtime 102.6%
- Quarterly Available Daylight Runtime Hours 1,020
 - Quarterly Runtime Hours 1,076

Quarterly % Runtime 105.5%

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AIR EMISSIONS MONITORING

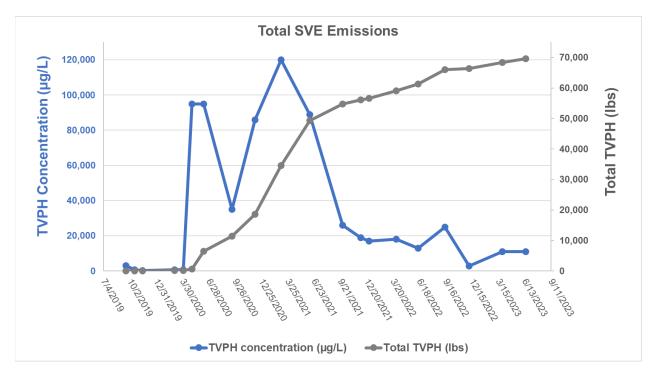
An initial air sample was collected on September 18, 2019, from the influent side of the blower on the SVE system. Subsequent air samples were collected quarterly with the most recent sample collected June 16, 2023 (Table 1). Samples were collected in 1-Liter Tedlar® bags via a high vacuum air sampler and submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for analyses of benzene, toluene, ethylbenzene, and total xylenes (BTEX) using United States Environmental Protection Agency (EPA) Method 8021B and total volatile petroleum hydrocarbons (TVPH) using EPA Method 8015D. The laboratory analytical report from the March 2023 vapor 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 69,586 pounds (lbs) of TVPH. An increase in TVPH mass removal was observed in May 2020 as a result of system optimization, through focusing system operation on the four SVE wells that were recovering vapor with the highest photoionization detector (PID) measurements (SVE03, SVE04, SVE05, and SVE06). After the reconfiguration in May 2020, there was a peak TVPH inlet concentration in March 2021 of 120,000 micrograms per liter (μ g/L). Since March 2021, mass removal has continued to generally decline, as seen in the graph below.

In February 2023, system operation was adjusted to focus on SVE03, SVE05, and SVE06. Operation on these three wells continued through June 2023.



Harvest Four Corners, LLC Trunk L Tank Battery



The June 2023 TVPH emissions rate decreased slightly, to approximately 1.11 pounds per hour (lbs/hr) or approximately 13.9 pounds per day, based on the average nominal daylight hours available, indicating that the SVE system is still effectively remediating the Site. The mass removal rate will continue to be monitored to evaluate system effectiveness.

PLAN FOR NEXT QUARTER OF OPERATION

During the upcoming third quarter 2023 operations, Ensolum will continue to visit the Site monthly to ensure a minimum of 90% runtime efficiency continues and that any maintenance issues are addressed in a timely manner. An air sample will be collected in the third quarter and analyzed for BTEX by EPA Method 8021 and TVPH by EPA Method 8015. An updated quarterly report with sample results, runtime, and mass source removal will be submitted by October 31, 2023.

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 BTEX and TPH are below the applicable standards as detailed in the approved *Remediation Work Plan* dated May 28, 2019.

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 <u>dburns@ensolum.com</u> or Jennifer Deal at (505) 324-5128 or at <u>jdeal@harvestmidstream.com</u>.



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Harvest Four Corners, LLC Trunk L Tank Battery

Sincerely,

ENSOLUM, LLC

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Reece Hanson Staff Geologist

Danny Burns Senior Geologist

APPENDICES

Figure 1 – Site Location Map Figure 2 – SVE System Layout Table 1 – SVE System Emissions Analytical Results Table 2 – SVE Mass Removal & Emissions Summary Appendix A – Photographic Log Appendix B – Laboratory Analytical Report





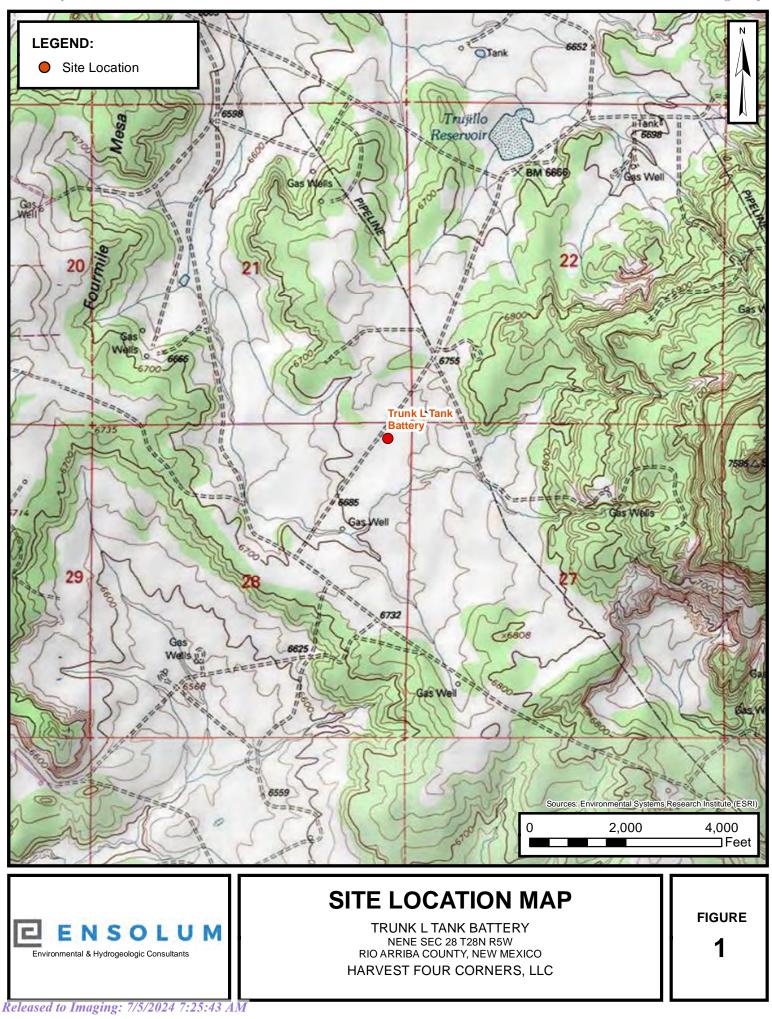
FIGURES

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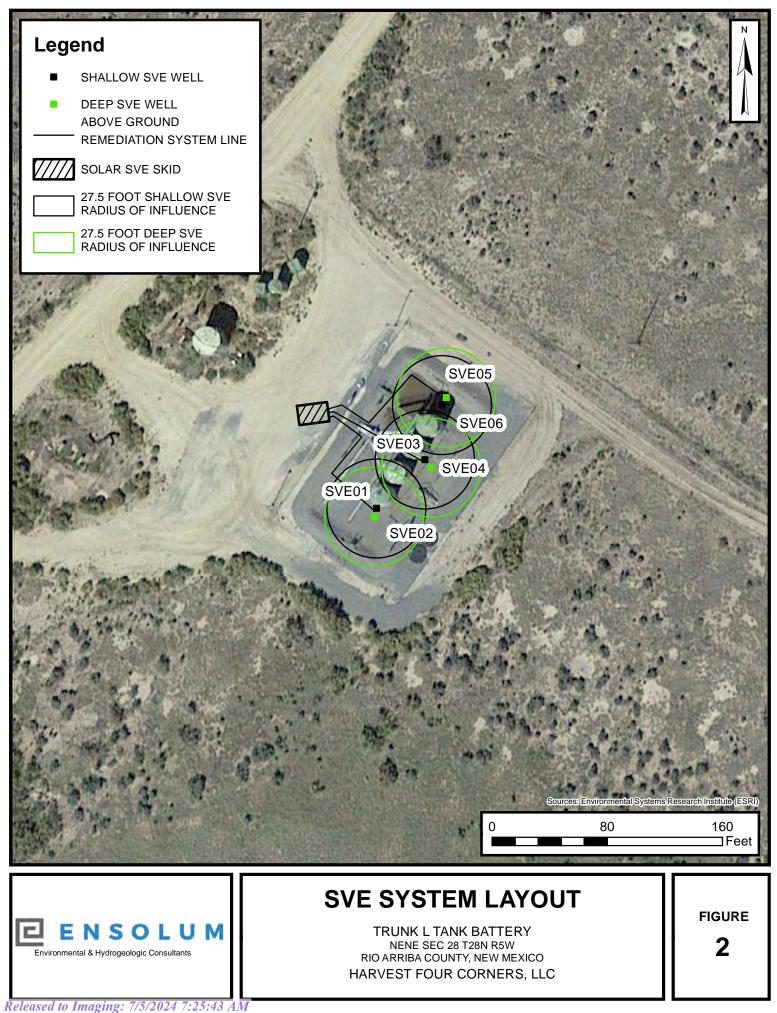
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TABLES

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TABLE 1 SOIL VAPOR EXTRACTION SYSTEM EMISSIONS ANALYTICAL RESULTS Trunk L Tank Battery 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)				
9/18/2019	946	1,000	1,500	50	550	NA				
10/18/2019	931	250	410	6.5	74	NA				
11/14/2019	578	1.8	4.3	0.19	1.7	250				
3/3/2020	868	3.9	22	1.3	13	760				
5/1/2020	913	610	1,500	58	570	95,000				
6/10/2020	1,527	640	1,600	56	530	95,000				
9/15/2020	1,077	180	840	24	230	35,000				
12/2/2020	1,320	380	1,100	23	270	86,000				
3/1/2021	1,469	440	2,100	110	1,100	120,000				
6/8/2021	1,380	300	1,200	42	380	89,000				
9/28/2021	916	150	230	<10	49	26,000				
11/29/2021	573	78	280	9.1	84	19,000				
12/27/2021	NA	120	240	<5.0	47	17,000				
3/31/2022	406	76	210	5.5	47	18,000				
6/13/2022	736	65	190	<5.0	51	13,000				
9/13/2022	1,640	62	170	<5.0	33	25,000				
12/5/2022	4,561	15	54	<5.0	13	2,900				
3/28/2023	1,296	27	89	5.8	57	11,000				
6/16/2023	1,263	22	63	<5.0	39	11,000				

Notes:

NA: Not analyzed

µg/L: microgram per liter

PID: photoionization detector

ppm: parts per million

GRO: gasoline range organics

TVPH: total volatile petroleum hydrocarbons

Italics denote that the laboratory method detection limit was reported

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

		1 104	v and Laboratory An			
Date	PID (ppm)	Benzene (µg/L)	Toluene (μg/L)	Ethylbenzene (µg/L)	Total Xylenes (μg/L)	TVPH (µg/L)
9/18/2019*	1,435	1,000	1,500	50	550	3,013
10/18/2019*	931	250	410	6.5	74	744
11/14/2019	578	1.8	4.3	0.19	1.7	250
3/3/2020	868	3.9	22	1.3	13	760
4/1/2020**	838	3.7	21	1.2	12	733
5/1/2020	913	610	1,500	58	570	95,000
6/10/2020	1,527	640	1,600	56	530	95,000
9/15/2020	1,077	180	840	24	230	35,000
12/2/2020	1,320	380	1,100	23	270	86,000
3/1/2021	1,469	440	2,100	110	1,100	120,000
6/8/2021	1,380	300	1,200	42	380	89,000
9/28/2021	916	150	230	10	49	26,000
11/29/2021	573	78	280	9.1	84	19,000
12/27/2021		120	240	5.0	47	17,000
3/31/2022	406	76	210	5.5	47	18,000
6/13/2022	736	65	190	5.0	51	13,000
9/13/2022	1,640	62	170	5.0	33	25,000
12/5/2022	4,561	15	54	5.0	13	2,900
3/28/2023	1,296	27	89	5.8	57	11,000
6/16/2023	1,263	22	63	5.0	39	11,000
Average	1,249	221	591	21	208	33,420

			Vap	or Extraction Summ	ary			
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)
9/18/2019	33.7	3,033	3,033	0.1262	0.1892	0.0063	0.0694	0.3801
10/18/2019	37.8	723,303	720,270	0.0353	0.0579	0.0009	0.0105	0.1051
11/14/2019	38.0	1,334,343	611,040	0.0003	0.0006	0.0000	0.0002	0.0356
3/3/2020	21.3	2,898,866	1,564,523	0.0003	0.0018	0.0001	0.0010	0.0605
4/1/2020	21.3	3,795,613	896,747	0.0003	0.0017	0.0001	0.0010	0.0583
5/1/2020	39.2	3,882,637	87,024	0.0895	0.2201	0.0085	0.0836	13.9404
6/10/2020	29.3	4,869,885	987,248	0.0703	0.1757	0.0061	0.0582	10.4304
9/15/2020	27.8	7,089,263	2,219,378	0.0187	0.0873	0.0025	0.0239	3.6384
12/2/2020	26.6	8,447,393	1,358,130	0.0379	0.1097	0.0023	0.0269	8.5730
3/1/2021	40.0	10,571,393	2,124,000	0.0659	0.3144	0.0165	0.1647	17.9683
6/8/2021	34.2	13,226,681	2,655,288	0.0384	0.1536	0.0054	0.0486	11.3941
9/28/2021	37.0	16,596,641	3,369,960	0.0208	0.0319	0.0014	0.0068	3.6011
11/29/2021	28.7	17,746,416	1,149,775	0.0084	0.0301	0.0010	0.0090	2.0434
12/27/2021	30.4	18,233,905	487,489	0.0137	0.0273	0.0006	0.0054	1.9365
3/31/2022	36.0	20,402,545	2,168,640	0.0102	0.0283	0.0007	0.0063	2.4257
6/13/2022	46.0	23,209,465	2,806,920	0.0112	0.0327	0.0009	0.0088	2.2385
9/13/2022	40.0	26,214,265	3,004,800	0.0093	0.0255	0.0007	0.0049	3.7434
12/5/2022	31.0	27,901,285	1,687,020	0.0017	0.0063	0.0006	0.0015	0.3365
3/28/2023	42.0	30,864,805	2,963,520	0.0042	0.0140	0.0009	0.0090	1.7294
6/16/2023	27.0	32,607,925	1,743,120	0.0022	0.0064	0.0005	0.0039	1.1118
			Average	0.03	0.08	0.003	0.03	4.29



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

9/18/2019 1.5 1.5 0.2 0.3 0.0 0.1 0.6 10/18/2019 319.5 318 11.2 18.4 0.3 3.3 33.4 11/14/2019 587.5 268 0.1 0.2 0.0 0.1 9.5 3/3/2020 1,814 1,226.5 0.4 2.1 0.1 1.3 74.2 4/1/2020 2,517 703 0.2 1.2 0.1 0.7 41.0 5/1/2020 2,554 37 3.3 8.1 0.3 3.1 515.8 6/10/2020 3,115 561 39.4 98.6 3.4 32.6 5,851 9/15/2020 4,447 1,332 24.9 116.3 3.3 31.8 4,866 12/2/2020 5,297 850 32.2 93.2 1.9 22.9 7,287 3/1/2021 6,182 885 58.3 278.3 14.6 145.8 15,902 6/8/2021 7,476	Date	Total SVE System Hours	Delta Hours	Benzene (pounds)	Toluene (pounds)	Ethylbenzene (pounds)	Total Xylenes (pounds)	TVPH (pounds)	TVPH (tons)
11/14/2019587.52680.10.20.00.19.53/3/20201,8141,226.50.42.10.11.374.24/1/20202,5177030.21.20.10.741.05/1/20202,554373.38.10.33.1515.86/10/20203,11556139.498.63.432.65,8519/15/20204,4471,33224.9116.33.331.84,84612/2/20205,29785032.293.21.922.97,2873/1/20216,18288558.3278.314.6145.815,9026/8/20217,4761,29449.7198.87.063.014,7449/28/20218,9941,51831.548.42.110.35,46711/29/20219,6616675.620.10.76.01,36312/27/20219,9282673.67.30.21.4517.03/31/202210,9321,00410.328.40.76.42,4356/13/202211,9491,01711.433.30.98.92,2779/13/202213,2011,25211.631.90.96.24,68712/5/202214,1089071.65.70.51.4305	9/18/2019	1.5	1.5	0.2	0.3	0.0	0.1	0.6	0.000
3/3/2020 1.814 1.226.5 0.4 2.1 0.1 1.3 74.2 4/1/2020 2,517 703 0.2 1.2 0.1 0.7 41.0 5/1/2020 2,554 37 3.3 8.1 0.3 3.1 515.8 6/10/2020 3,115 561 39.4 98.6 3.4 32.6 5,851 9/15/2020 4,447 1,332 24.9 116.3 3.3 31.8 4,846 12/2/2020 5,297 850 32.2 93.2 1.9 22.9 7,287 3/1/2021 6,182 885 58.3 278.3 14.6 145.8 15,902 6/8/2021 7,476 1,294 49.7 198.8 7.0 63.0 14,744 9/28/2021 8,994 1,518 31.5 48.4 2.1 10.3 5,467 11/29/2021 9,661 667 5.6 20.1 0.7 6.0 1,363 12/27/2021	10/18/2019	319.5	318	11.2	18.4	0.3	3.3	33.4	0.017
4/1/20202,5177030.21.20.10.741.05/1/20202,554373.38.10.33.1515.86/10/20203,11556139.498.63.432.65,8519/15/20204,4471,33224.9116.33.331.84,84612/2/20205,29785032.293.21.922.97,2873/1/20216,18288558.3278.314.6145.815,9026/8/20217,4761,29449.7198.87.063.014,7449/28/20218,9941,51831.548.42.110.35,46711/29/20219,6616675.620.10.76.01,36312/27/20219,9282673.67.30.21.4517.03/31/202210,9321,00410.328.40.76.42,4356/13/202211,9491,01711.433.30.98.92,2779/13/202213,2011,25211.631.90.96.24,68712/5/202214,1089071.65.70.51.4305	11/14/2019	587.5	268	0.1	0.2	0.0	0.1	9.5	0.005
5/1/20202,554373.38.10.33.15186/10/20203,11556139.498.63.432.65,8519/15/20204,4471,33224.9116.33.331.84,84612/2/20205,29785032.293.21.922.97,2873/1/20216,18288558.3278.314.6145.815,9026/8/20217,4761,29449.7198.87.063.014,7449/28/20218,9941,51831.548.42.110.35,46711/29/20219,6616675.620.10.76.01,36312/27/20219,9282673.67.30.21.4517.03/31/202210,9321,00410.328.40.76.42,4356/13/202211,9491,01711.433.30.98.92,2779/13/202213,2011,25211.631.90.96.24,68712/5/202214,1089071.65.70.51.4305	3/3/2020	1,814	1,226.5	0.4	2.1	0.1	1.3	74.2	0.037
Ander Ander <th< td=""><td>4/1/2020</td><td>2,517</td><td>703</td><td>0.2</td><td>1.2</td><td>0.1</td><td>0.7</td><td>41.0</td><td>0.021</td></th<>	4/1/2020	2,517	703	0.2	1.2	0.1	0.7	41.0	0.021
11101111011101110111011121113224.9116.33.331.84,84612/2/20205.29785032.293.21.922.97,2873/1/20216,18288558.3278.314.6145.815,9026/8/20217,4761,29449.7198.87.063.014,7449/28/20218,9941,51831.548.42.110.35,46711/29/20219,6616675.620.10.76.01,36312/27/20219,9282673.67.30.21.4517.03/31/202210,9321,00410.328.40.76.42,4356/13/202211,9491,01711.433.30.98.92,2779/13/202213,2011,25211.631.90.96.24,68712/5/202214,1089071.65.70.51.4305	5/1/2020	2,554	37	3.3	8.1	0.3	3.1	515.8	0.258
12/2/20205,29785032.293.21.922.97,2873/1/20216,18288558.3278.314.6145.815,9026/8/20217,4761,29449.7198.87.063.014,7449/28/20218,9941,51831.548.42.110.35,46711/29/20219,6616675.620.10.76.01,36312/27/20219,9282673.67.30.21.4517.03/31/202210,9321,00410.328.40.76.42,4356/13/202211,9491,01711.433.30.98.92,2779/13/202213,2011,25211.631.90.96.24,68712/5/202214,1089071.65.70.51.4305	6/10/2020	3,115	561	39.4	98.6	3.4	32.6	5,851	2.926
3/1/2021 6,182 885 58.3 278.3 14.6 145.8 15,902 6/8/2021 7,476 1,294 49.7 198.8 7.0 63.0 14,744 9/28/2021 8,994 1,518 31.5 48.4 2.1 10.3 5,467 11/29/2021 9,661 667 5.6 20.1 0.7 6.0 1,363 12/27/2021 9,928 267 3.6 7.3 0.2 1.4 517.0 3/31/2022 10,932 1,004 10.3 28.4 0.7 6.4 2,435 6/13/2022 11,949 1,017 11.4 33.3 0.9 8.9 2,277 9/13/2022 13,201 1,252 11.6 31.9 0.9 6.2 4,687 12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	9/15/2020	4,447	1,332	24.9	116.3	3.3	31.8	4,846	2.423
6/8/2021 7,476 1,294 49.7 198.8 7.0 63.0 14,744 9/28/2021 8,994 1,518 31.5 48.4 2.1 10.3 5,467 11/29/2021 9,661 667 5.6 20.1 0.7 6.0 1,363 12/27/2021 9,928 267 3.6 7.3 0.2 1.4 517.0 3/31/2022 10,932 1,004 10.3 28.4 0.7 6.4 2,435 6/13/2022 11,949 1,017 11.4 33.3 0.9 8.9 2,277 9/13/2022 13,201 1,252 11.6 31.9 0.9 6.2 4,687 12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	12/2/2020	5,297	850	32.2	93.2	1.9	22.9	7,287	3.644
9/28/2021 8,994 1,518 31.5 48.4 2.1 10.3 5,467 11/29/2021 9,661 667 5.6 20.1 0.7 6.0 1,363 12/27/2021 9,928 267 3.6 7.3 0.2 1.4 517.0 3/31/2022 10,932 1,004 10.3 28.4 0.7 6.4 2,435 6/13/2022 11,949 1,017 11.4 33.3 0.9 8.9 2,277 9/13/2022 13,201 1,252 11.6 31.9 0.9 6.2 4,687 12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	3/1/2021	6,182	885	58.3	278.3	14.6	145.8	15,902	7.951
11/29/2021 9,661 667 5.6 20.1 0.7 6.0 1,363 12/27/2021 9,928 267 3.6 7.3 0.2 1.4 517.0 3/31/2022 10,932 1,004 10.3 28.4 0.7 6.4 2,435 6/13/2022 11,949 1,017 11.4 33.3 0.9 8.9 2,277 9/13/2022 13,201 1,252 11.6 31.9 0.9 6.2 4,687 12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	6/8/2021	7,476	1,294	49.7	198.8	7.0	63.0	14,744	7.372
12/27/2021 9,928 267 3.6 7.3 0.2 1.4 517.0 3/31/2022 10,932 1,004 10.3 28.4 0.7 6.4 2,435 6/13/2022 11,949 1,017 11.4 33.3 0.9 8.9 2,277 9/13/2022 13,201 1,252 11.6 31.9 0.9 6.2 4,687 12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	9/28/2021	8,994	1,518	31.5	48.4	2.1	10.3	5,467	2.733
All of the second sec	11/29/2021	9,661	667	5.6	20.1	0.7	6.0	1,363	0.681
6/13/2022 11,949 1,017 11.4 33.3 0.9 8.9 2,277 9/13/2022 13,201 1,252 11.6 31.9 0.9 6.2 4,687 12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	12/27/2021	9,928	267	3.6	7.3	0.2	1.4	517.0	0.259
9/13/2022 13,201 1,252 11.6 31.9 0.9 6.2 4,687 12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	3/31/2022	10,932	1,004	10.3	28.4	0.7	6.4	2,435	1.218
12/5/2022 14,108 907 1.6 5.7 0.5 1.4 305	6/13/2022	11,949	1,017	11.4	33.3	0.9	8.9	2,277	1.138
	9/13/2022	13,201	1,252	11.6	31.9	0.9	6.2	4,687	2.343
3/28/2023 15,284 1,176 5.0 16.5 1.1 10.5 2,034	12/5/2022	14,108	907	1.6	5.7	0.5	1.4	305	0.153
	3/28/2023	15,284	1,176	5.0	16.5	1.1	10.5	2,034	1.017
6/16/2023 16,360 1,076 2.4 6.9 0.5 4.2 1,196	6/16/2023	16,360	1,076	2.4	6.9	0.5	4.2	1,196	0.598

μg/L - microgram per liter PID - photoionization detector

ppm - parts per million

TVPH - total volatile petroleum hydrocarbons

VOC Mass Removed (lbs) = Influent VOCs (mg/m³) * Air Flow Rates (cfm) * (1 m³/35.3147 ft³) * (1 lb/453,592 mg) * Time Period (min)

VOC - volatile organic compounds

Notes:

* - TVPH data extrapolated from PID values

** - Analytical data extrapolated from PID values

BTEX - benzene, toluene, ethylbenzene, total xylenes

cf - cubic feet

cfm - cubic feet per minute

lbs - pounds

lb/hr - pounds per hour

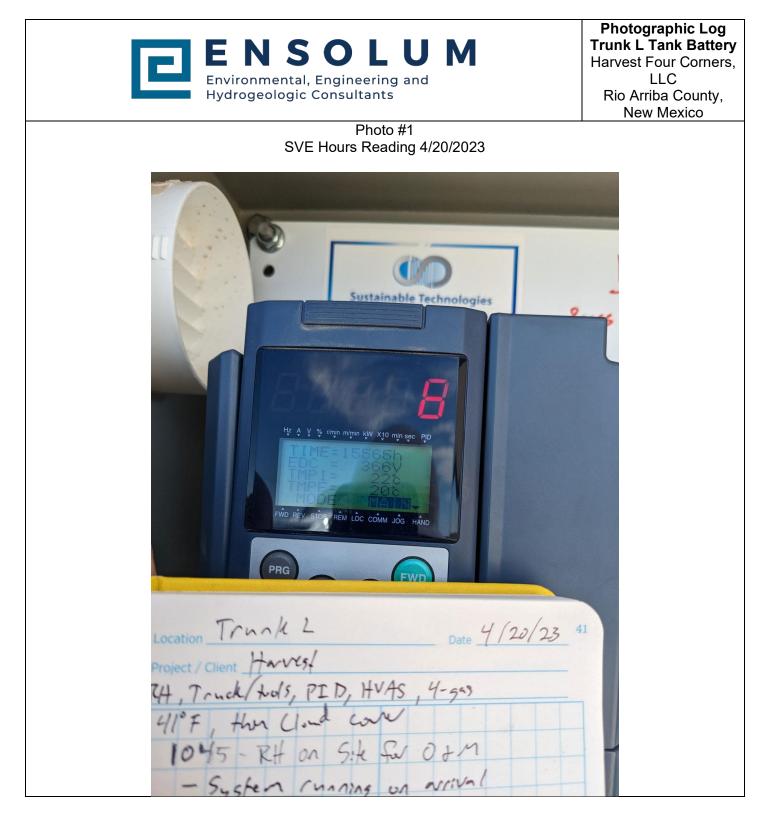
Italics denote that the laboratory method detection limit was used for calculations for a non-detected result

Ensolum, LLC Soil Vapor Extraction System Mass Removal and Emissions

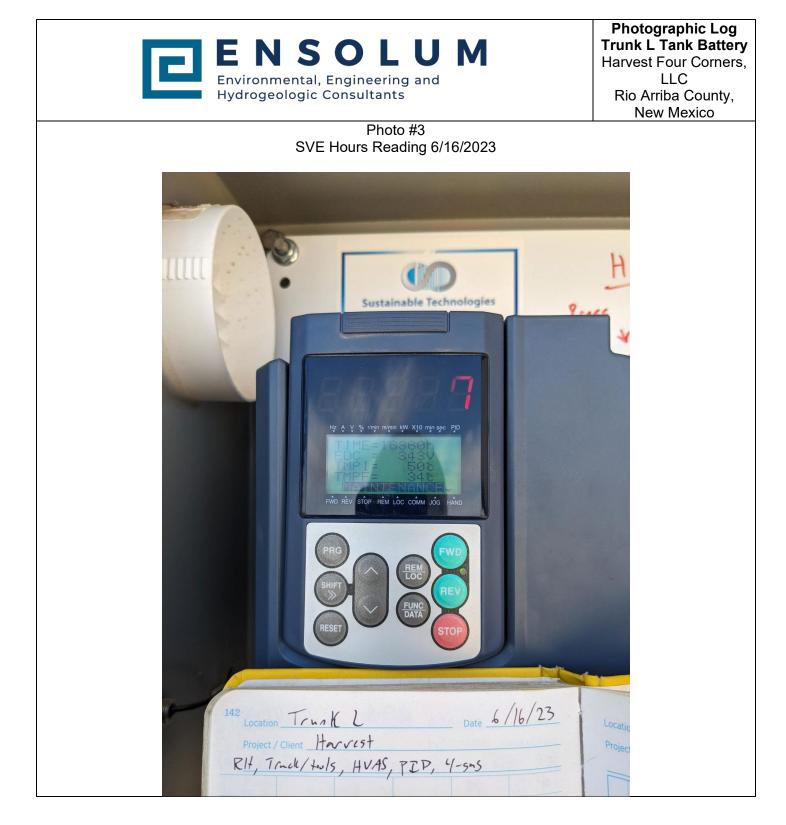


APPENDIX A

Photographic Log









APPENDIX B

Laboratory Analytical Report



June 26, 2023 Jennifer Deal Harvest 1755 Arroyo Dr. Bloomfield, NM 87413 TEL: (505) 632-4475 FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 2306950

Dear Jennifer Deal:

RE: Trunk L

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/17/2023 for the analyses presented in the following report.

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

Please don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

Ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Hall Environmental	Analysis	Laboratory, Inc.	
	•	•	

Lab Order 2306950

Date Reported: 6/26/2023

CLIENT: Harvest		Clien	t Sample II	D: Inf	luent					
Project: Trunk L		Col	lection Dat	e: 6/1	6/2023 11:12:00 AM					
Lab ID: 2306950-001	Matrix: AIR Received Date: 6/17/2023 7:50:00 AM									
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch				
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	t: JJP				
Gasoline Range Organics (GRO)	11000	250	µg/L	50	6/21/2023 2:17:33 PM	GA9761(
Surr: BFB	135	15-412	%Rec	50	6/21/2023 2:17:33 PM	GA97610				
EPA METHOD 8021B: VOLATILES					Analys	t: JJP				
Methyl tert-butyl ether (MTBE)	ND	12	µg/L	50	6/21/2023 2:17:33 PM	R97610				
Benzene	22	5.0	µg/L	50	6/21/2023 2:17:33 PM	R97610				
Toluene	63	5.0	µg/L	50	6/21/2023 2:17:33 PM	R97610				
Ethylbenzene	ND	5.0	µg/L	50	6/21/2023 2:17:33 PM	R97610				
Xylenes, Total	39	10	µg/L	50	6/21/2023 2:17:33 PM	R97610				
Surr: 4-Bromofluorobenzene	87.5	70-130	%Rec	50	6/21/2023 2:17:33 PM	R97610				

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

Qualifiers:

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

Page 1 of 1

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environment Aı TEL: 505-345-39 Website: www.	490 Ibuquerq 75 FAX:	l Hawk ue. NM 505-34:	ins NE 87109 5-4107	Sam	ple Log-In Chec	< List
Client Name: Harvest	Work Order Numbe	er: 2306	6950			RcptNo: 1	
Received By: Tracy Casarrubias	6/17/2023 7:50:00 A						
Completed By: Tracy Casarrubias	6/17/2023 11:47:57	AM					
Reviewed By: mb/19/23							
Chain of Custody							
1. Is Chain of Custody complete?		Yes		No	\checkmark	Not Present	
2. How was the sample delivered?		Cou	rier				
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	V	No			
7. Are samples (except VOA and ONG) prope	rly preserved?	Yes		No			
8. Was preservative added to bottles?		Yes		No	\checkmark	NA 🗖	
9. Received at least 1 vial with headspace <1/	4" for AO VOA?	Yes	Π	No		NA 🗹	
10. Were any sample containers received brok		Yes			V		/
						# of preserved bottles checked	
11. Does paperwork match bottle labels?		Yes	\checkmark	No		for pH:	nless noted)
(Note discrepancies on chain of custody)		N		No		Adjusted?	icos noted)
12. Are matrices correctly identified on Chain o	f Custody?	Yes Yes		No			
13. Is it clear what analyses were requested?		Yes		No		Checked by: TMc	6/17/23
14. Were all holding times able to be met? (If no, notify customer for authorization.)		103	ليك		_		
Special Handling (if applicable)							
15. Was client notified of all discrepancies with	this order?	Yes		No		NA 🗹	
Person Notified:	Date:				-		
By Whom:	Via:	*	lail 🗌] Phone	Fax	In Person	
Regarding:							
Client Instructions: Mailing address	and phone number mis	sing on	COC-1	TMC 6/17/2	3	and the second	
16. Additional remarks:							
17. <u>Cooler Information</u> Cooler No Temp °C Condition	Seal Intact Seal No	Seal I	Date	Signed	Bv		
	es Yogi	Jearl	Jaic	Gigned	-,		
11	1						

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Released to Imaging: 7/5/2024 7:25:43 AM

Page 19 of 21

Received by OCD: 7/24/2023 1:17:24 PM

Page 2	0 of 2	1
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0	hair	I-of-C	ustody Record	Turn-Around		<u></u>	1													
Client:	Hann	est M	Strenm Smith Sennifer Deal	- ج- ک ⊠ Standard	ק מי ם Rus	F		1000											NT/	
ALL	- AA	RI	South Semper Deal	Project Nam			- 6			A		AL	YS	IS	5 L	AE	30	RA	то	RY
Mailing	Addres	s:	ran Dennite Very		-unk L						www	.hall	envir	onn	nent	tal.co	om			
				Project #:			-	49	01 H	lawk	ins N	E -	Albu	ique	ərqu	e, NI	M 87	109		
Phone	#.			-				Te	əl. 50)5-34	15-39	75	Fa	ax (505-	345-	-4107		204.	
		1 10.10	harvestmidstream.com					0					alys	sis I	Req	uest				in the second
	Package		MUVVesting o Stream Com				E	Q					S04		-	ent)	-			
□ Star		•	Level 4 (Full Validation)	Re	ece Han	ion	(80)	Ň	PCB's		IWS		04,		200	Abse				
	itation:		ompliance	Reece Hanson <u>chansone ersolum.com</u> Sampler: Reece Hanson			ER-	NS NS	2 P(70S		Å			ant/P				
		□ A2 00	•	On Ice:	Ves Yes	No start	₹	2	808	4.1)	r 82	321	2	12.5	2	rese	1017-001			
) (Type)			# of Coolers:	1	□ No yogi N/A	BTEX MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	als	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ ,		8270 (Semi-VOA)	Total Coliform (Present/Absent)				
				Cooler Temp	(Including CF)+2.(0-0.1-2.5 (°C)	E	5D(stici	stho	83.	Met	Ž	R	-imi	ifor				
				Container	Preservative			801	Ъ	ž	s by	A 8	m i	ž	(Se	S				
Date	Time	Matrix	Sample Name	Type and #	Type	HEAL No.		됩	808		AH	RCRA 8 Metals	L 0	8260 (VOA)	270	otal				
6/16/23	1112	Gas	Influent	2, Tellor		001	X	\forall				<u> </u>	4	20	~		-+-			- + - + - + + - + + + + + + + + + + +
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Date:	Time:	Relinquishe	ed by:	Received by:	Via: caure					21	0~1	15	E	4	יל ר	plui	m. (0~		
7/16/23	1806	14	Alo y/ utal	L'		6/17/27														

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 243717

CONDITIONS Operator: OGRID: Harvest Four Corners, LLC 373888 1755 Arroyo Dr Action Number: Bloomfield, NM 87413 243717 Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created	Condition	Condition
Ву		Date
nvelez	Accepted for the record. See App ID 339334 for most updated status.	7/5/2024