



GAS MITIGATION MONTHLY REPORT - OCTOBER 2022

Property:

**South Hobbs G/SA Unit
Unit F, Section 5, Township 19S, Range 38E
Latitude 32.690683, Longitude -103.173158
Lea County, New Mexico**

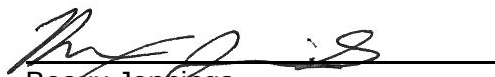
**New Mexico EMNRD OCD
Order No. R-4934-F, Case No. 14981**

January 20, 2023

Prepared for:

**Occidental Permian LTD
6001 Deauville Blvd.
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ENSOLUM

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GAS MITIGATION MONTHLY REPORT – OCTOBER 2022

South Hobbs G/SA Unit Operations
Order No. R-4934-F, Case No. 14981
Unit F, Section 5, Township 19S, Range 38E
Latitude 32.690683, Longitude -103.173158
Lea County, New Mexico

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Occidental Permian LTD (OXY)
Site Name:	South Hobbs G/SA Unit Operations (Site)
Location:	Unit F, Section 5, Township 19 South, Range 38 East Latitude 32.690683, Longitude -103.173158 Lea County, New Mexico
Property Owner:	OXY
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) New Mexico Oil Conservation Division (NMOCD) Order No. R-4934-F Case No. 14981

This Gas Mitigation Monthly Report - October 2022 summarizes activities subsequent to the *Gas Mitigation Monthly Report - November 2021*, dated December 14, 2021, the *Gas Mitigation Monthly Report - December 2021*, dated January 20, 2022, the *Gas Mitigation Monthly Report - January 2022*, dated March 1, 2022, the *Gas Mitigation Monthly Report - February 2022*, dated March 24, 2022, the *Gas Mitigation Monthly Report - March 2022*, dated May 4, 2022, the *Gas Mitigation Monthly Report - April 2022*, dated July 11, 2022, the *Gas Mitigation Monthly Report - May 2022*, dated July 22, 2022 and the *Gas Mitigation Monthly Report - June 2022*, dated July 22, 2022, the *Gas Mitigation Monthly Report - July 2022*, dated September 1, 2022, the *Gas Mitigation Monthly Report - August 2022*, dated December 6, 2022, and the *Gas Mitigation Monthly Report – September 2022*, dated December 6, 2022. All wells are located within operations that are part of the South Hobbs Grayburg/San Andres Unit (SHU) Field in the southwestern area of the City of Hobbs, Lea County, New Mexico. Collectively, the Levey water well (Levey Well) and the two monitoring wells (MW-1 and MW-2) are referred to as the “Site”.

OXY has investigated groundwater and oil and gas operation well conditions in the area of the Site. A Site Map, which indicates the approximate locations of the Levey Well and monitoring wells MW-1 and MW-2 in relation to pertinent structures and general Site boundaries, is included as **Figure 1 in Appendix A**.

On June 30, 2019, elevated pressure was observed at the Levey Well. At the request of the New Mexico Oil Conservation Division (NMOCD), localized area wells were “shut in” from operational use. Over time, the pressure being observed at the Levey Well declined until pressure was no longer recorded. Observations and water analysis of the Levey water well did identify free gas in the well bore; however, pressure from the underlying groundwater-bearing zone was no longer present. Operational data was analyzed as part of the area wide assessment and adjacent wells investigated as potential sources for the gas infiltration. During maintenance operations at SHU #183, located approximately 575 feet southwest of the Levey Well, the SHU #183 well string was pulled, and pressures measured for proof of casing integrity. During these operations, SHU #183 was found to have a casing leak, which is believed to be the source of the pressure observed at Levey well. In response, OXY plugged the SHU #183 well to surface. No other anomalies were observed in the adjacent area oil and gas wells. After SHU #183 was plugged, OXY drilled a nearby replacement well. This replacement well, designated as SHU #297, is currently operational and shows no concerns of free gas migration.

In February of 2020, permission was obtained from the NMOCD to drill two monitoring wells (MW-1 and MW-2) for analysis and observation purposes. Monitoring well MW-1 was installed in the vicinity of the Levey Well and monitoring well MW-2 was installed in the vicinity of SHU #183.

During initial pre-start up background sampling of the Levey Well, MW-1 and MW-2 on two separate events, May 25th and June 20th of 2020, gas with lower explosive limits (LEL's) at or over 60% were observed in the Levey Well and monitoring well MW-2. This finding was consistent with previous analysis and findings within the Levey Well and not an unexpected result as the previous contributions of gas from the SHU #183 had been sufficient to result in pressure at the surface through the Levey Well.

OXY's groundwater monitoring program included the collection of a groundwater sample from each monitoring well (MW-1 and MW-2). The monitoring wells were gauged and sampled on May 26, June 30, August 20, October 23, November 24, December 18, 2020, and weekly thereafter. The Levey Well has been sampled consistently from December 6, 2019, to October 27, 2022. The groundwater samples collected from the monitoring wells (MW-1 and MW-2) were analyzed for total petroleum hydrocarbons (TPH), gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO) utilizing Environmental Protection Agency (EPA) Method 8015M, volatile organic compounds (VOCs) utilizing EPA Method SW-846 #8260 (full list), carbon dioxide utilizing Standard Method 4500 CO₂ C, dissolved sulfide utilizing EPA Method SW-846 #376.2, chloride using EPA Method SW-846 #300.0 and pH utilizing EPA Method SW-846 #150.1. The groundwater samples collected from the Levey Well were analyzed for VOCs, recoverable metals per ICP by EPA 200.7, inorganic anions by EPA 300/300.1, pH by SM4500-H, total dissolved solids (TDS) by SM2540C, alkalinity by SM2320B and cation-anion balance by SM1030E.

During the October 2022 groundwater sampling event the groundwater samples did not exhibit constituent concentrations above New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards* (GQSs), with the exception of benzene and TDS. Benzene concentrations ranged from 0.0141 milligrams per liter (mg/L) to 0.0185 mg/L in monitoring well MW-2. TDS analytical results ranged from 706 mg/L to 1,340 mg/L in the Levey Well. Although above the GQS, these TDS concentrations are consistent with background levels in the Quaternary Alluvium, Ogallala Formation, and the Dockum Group (i.e., the three groundwater bearing units) in Southern Lea County (Nicholson and Clebsch, 1961). The groundwater analytical summary tables are included in **Appendix B**.

OXY utilized automated processes to compile and monitor dates related to the SHU localized wells to ensure tracking of production and injection activities as related to the re-start of these area operations. No anomalies were observed in the area oil and gas wells that could contribute free gas into the groundwater-bearing zone.

To mitigate potential exposures, the Levey residence was purchased by OXY and remains unoccupied. A passive vent was installed on the Levey Well to mitigate safety and explosivity concerns for the residential and work area. There has been no detectable build-up of pressure in the Levey Well or monitoring wells MW-1 and MW-2. Hydrogen sulfide (H_2S) has not been detected in any of the three aforementioned wells since July 15, 2020. All detections of H_2S prior to July 15, 2020 were within the well bore. No H_2S above permissible exposure limits was observed outside of the well bores.

OXY installed pressure reading charts at the Levey Well to measure the potential for any returning pressure at the well. These charts measure pressure 24 hours a day and show that no pressure has returned to the Levey Well. Monitoring wells MW-1 and MW-2 were physically monitored for the presence of gas and pressure on several dates from 7/1/2020 to 10/31/2022, with no pressure observed in either monitoring well. The pressure reading charts available for October 2022 are included in **Appendix D**.

The data indicates that pressure sourced from SHU #183 contributed to the infiltration of free gas into the red beds just beneath the groundwater-bearing zone, creating a pressurized pool of gas that traveled to the Levey Well. Once SHU #183 was plugged, the pressure source was removed from the red beds and overlying groundwater-bearing zone and the remaining free gases below remain pooling within the red bed underlying the groundwater-bearing zone. This is supported by the data described above and is consistent with findings reported in two reports, one co-authored and supplied by Lisa Molofsky of GSI Environmental Inc. The first is "Purging and other sampling variables affecting dissolved methane concentration in water supply wells", and the second "Factors affecting the variability of stray gas concentration and composition in groundwater" authored by A.W. Gorody, referenced below. The reports state:

As free-phase gas spreads vertically and/or laterally from a source of release, it can become trapped beneath low permeability sediments (e.g., the "red beds" which separate the overlying Ogallala aquifer from the underlying Santa Rosa). Irregularities in the base topography of these barriers can result in discretized pools of free-phase gas. In many ways, this trapping and accumulation of free-phase gases beneath impermeable units is analogous to the development of structural traps that form in conventional oil and gas reservoirs. This phenomenon can also be viewed as the conceptual inverse of a chlorinated solvent release (a dense NAPL, or "DNAPL") in which the dense liquid can migrate downward through the groundwater via available pathways, until encountering a resistant layer, where the dense liquid pools and accumulates.

In water supply wells, free-phase gas entry is most likely to occur when water levels are lowered in a well by pumping or drought, because this reduces the pressure head resisting gas entry from the formation into the well (Gorody 2012, Molofsky et al. 2018). This may allow free-phase gas to enter the well from one unit (e.g., red bed), while water is primarily originating from another (e.g., the Ogallala aquifer). When the two phases (free-phase gas from the red bed and groundwater from the Ogallala) mix in the water well, there is relatively little time for equilibration under pumping conditions; consequently, dissolved gas concentrations may be very low even though free-phase gas is observed in the well headspace.

These studies and OXY's related findings are that the remaining free gas beneath portions of the Site is pooled within the red beds and the overlying geologic pressure is such that it is confining the free gas. The free gas observed in the Levey Well and monitoring well MW-2 well bores are traveling through these conduits to near surface but lack the pressure to release from the subsurface as the additional pressure from SHU #183 has been eliminated. This coupled with the finding that there is little mixing of constituents of gases into the dissolved phase within the adjacent groundwater supports the understanding that the gases are remaining beneath the water interface and only traveling up to surface when the relative pressure allows it to do so, rather than mixing with the water source.

The data indicates that the current free gas in the subsurface has reached a point of equilibrium and, without influence, is stable. To mobilize the free gas, a pressure change was proposed to release the free gas pool from the subsurface red bed, as described below in Section 1.3.

1.2 Groundwater Recovery – Levey Well

As of July 1, 2021, the Levey Well has run full time and recovered groundwater is transferred via flowline to a nearby tank for proper disposal. The groundwater recovered from the Levey Well during October 1 - 31, 2022 was approximately 716,641 gallons. Due to a severe winter storm on February 2, 2022, the Levey well flowline pump was damaged. Replacement parts were ordered, the pump was repaired and has been active as of March 14, 2022.

1.3 Gas Recovery – Levey Well

OXY conducted two vacuum recovery events during the month of October 2022 with positive results as shown on **Table 4** in **Appendix B**. The purpose of this event was to attach a vacuum pump truck to the Levey Well, creating a vacuum on the wellbore, and displacing the underlying water releasing the overlying pressure restraining the free gas pool, and releasing it to the surface. This process will continue into November 2022 once every two weeks until the sampling results of the air is minimal after displacement of the overlying pressure, or the process proves to become ineffective.

2.0 AIR AND GROUNDWATER MONITORING

2.1 Air Sampling Program

Levey Well

The air samples from October 10, 2022, and October 24, 2022, were taken prior to, during, and subsequent to the vacuum recovery events utilizing Summa[®] canisters. Upon arrival at the Site, the Levey Well is turned off and allowed to stabilize for approximately one hour. An air sample is taken after one hour of the Levey Well stabilization, prior to initiating the vacuum recovery event.

During the October 10, 2022, and October 24, 2022, vacuum recovery events, the vacuum was applied to the Levey Well for a duration of approximately two hours. Approximately one hour and two hours into the event, an air sample was taken. The vacuum was then turned off and an additional air sample from the Levey Well was taken one hour subsequent to the vacuum recovery event. Water was not recovered during the vacuum recovery event.

The Summa[®] canisters were shipped under proper chain-of-custody to Pace Analytical Laboratory in Mount Juliet, TN for analysis of volatile organic compounds (VOCs) by Method TO-15. Laboratory analytical results are summarized in **Table 4** in **Appendix B**. The executed chain-of-custody forms and laboratory data sheets from the October 2022 sampling events are provided in **Appendix C**.

2.2 Groundwater Sampling Program

Groundwater sampling events were conducted each week on the Levey Well and monitoring wells MW-1 and MW-2. The groundwater sampling program followed the requirements from NMOCD and consists of the following:

Levey Well

As of July 1, 2021, the Levey water well ran full time until February 2, 2022. The Levey well recovered groundwater is transferred via flowline to a nearby tank battery for proper disposal. Prior to sample collection, the Levey Well is turned off and allowed to stabilize for approximately one hour prior to sampling. Once the Levey Well is properly purged and readings from the AquaTROLL 500 stabilize, a groundwater sample is collected.

As previously stated, due to a severe winter storm on February 2, 2022, the Levey well flowline pump was damaged. Replacement parts were ordered, the pump was repaired and is now active as of March 14, 2022.

The groundwater samples collected from the Levey Well were analyzed for VOCs, recoverable metals per ICP by EPA 200.7, inorganic anions by EPA 300/300.1, pH by SM4500-H, TDS by SM2540C, alkalinity by SM2320B and cation-anion balance by SM1030E.

Monitoring Wells MW-1 and MW-2

Prior to sample collection, the depth to fluids in each monitoring well (MW-1 and MW-2) are gauged using a water level meter capable of detecting groundwater up to 0.01 feet. Each monitoring well is then sampled utilizing micro-purge low-flow sampling techniques. Subsequent to the completion of the micro-purge process, one groundwater sample is collected from each monitoring well.

The groundwater samples collected from monitoring wells MW-1 and MW-2 were analyzed for TPH GRO, TPH DRO and ORO utilizing EPA Method 8015M, VOCs utilizing EPA Method SW-846 #8260, carbon dioxide utilizing Standard Method 4500, dissolved sulfide utilizing EPA Method SW-846 #376.2, chloride using EPA Method SW-846 300.0 and pH utilizing EPA Method SW-846 #150.1.

Low flow refers to the velocity with which groundwater enters the pump intake and is imparted to the formation water in the immediate vicinity of the well screen. The objective is to pump in a manner that minimizes stress (drawdown) to the system, to the extent practical, taking into account established Site sampling objectives. Flow rates on the order of 0.1 to 0.5 liters per minute (l/min) will be maintained during sampling activities, using dedicated or decontaminated sampling equipment.

The groundwater samples are collected from each monitoring well once produced groundwater is consistent in color, clarity, pH, temperature, and conductivity. Measurements during purging are taken every three to five minutes. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for three successive readings.

Groundwater samples were collected in laboratory supplied containers, labeled/sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for Eurofins Xenco (formerly Xenco) of Midland, Texas under proper chain-of-custody procedures.

Laboratory analytical results are summarized in **Tables 1** through **Table 3** in **Appendix B**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix C**.

3.0 DATA EVALUTATION

3.1 Air Samples

Gas mitigation activities at the Levey Well began on November 8, 2021 and will continue on a bi-weekly basis through November 2022. Based on the concentrations observed in the Levey Well air samples, the vacuum recovery events are drawing the free gas over to the Levey Well. Prior to each vacuum recovery event, an air sample is taken to give a representative snapshot of static conditions of gas in the subsurface. Elevated concentrations of acetone, cyclohexane, ethanol, heptane, n-hexane, 2-Butanone (MEK), 2-propanol, and/or TPH were observed prior to the initiation of each vacuum recovery event.

Once initiated, an air sample is taken at one hour and two hours into the vacuum recovery event. During each of the vacuum recovery events, acetone, cyclohexane, ethanol, heptane, n-hexane, 2-propanol, 2-Butanone (MEK), toluene, and TPH concentrations significantly decrease throughout the duration of the event.

Approximately one hour after the termination of the vacuum recovery event, a final air sample is collected. Elevated concentrations of benzene, carbon disulfide, cyclohexane, ethanol, 4-ethyltoluene, heptane, n-hexane, 2-Butanone (MEK), 2-propanol, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m&p-Xylene, o-Xylene and TPH begin to accumulate inside the Levey water well casing. These results indicate that the vacuum recovery events are successful in drawing the subsurface gas over to the Levey Well.

Air samples are also collected on a bi-weekly basis approximately one week subsequent to the vacuum recovery event. During each of the bi-weekly air sampling events, elevated concentrations of acetone, carbon disulfide, cyclohexane, ethanol, heptane, n-hexane, 2-Butanone (MEK), 2-propanol, Tetrachloroethylene, and/or TPH were observed inside the Levey water well casing. These results again indicate that the vacuum recovery events are successful in drawing the subsurface gas over to the Levey Well.

3.2 Groundwater Samples

Ensolum compared the laboratory analytical results or laboratory practical quantitation limits (PQLs) associated with the October 2022 groundwater samples collected from the Levey Well and monitoring wells MW-1 and MW-2 to the New Mexico WQCC GQSSs. The results of the groundwater sample analyses are summarized in **Table 1** through **Table 3** of **Appendix B**. All analytical results were below the WQCC GQSSs, with the exception of the analytes, as discussed below.

Levey Well

TDS analytical results ranged from 706 mg/L to 1,340 mg/L in the Levey Well. Although above the GQS, these TDS concentrations are consistent with background levels in the Quaternary Alluvium, Ogallala Formation, and the Dockum Group (i.e., the three groundwater bearing units) in Southern Lea County (Nicholson and Clebsch, 1961). Specifically, for the 20 water supply wells sampled by the USGS in Southern Lea County with TDS analyses, the median TDS concentration was 722 mg/L, and the 75th percentile TDS concentration was 1,953 mg/L.

The Levey Well sampling first began on December 6, 2019. Through mitigation activities, including groundwater recovery and vacuum recovery events, the benzene concentration in the Levey Well has significantly decreased over time, with the exception of December 29, 2021, which had a benzene analytical result of 0.00611 mg/L, the January 19, 2022, which had a benzene analytical result of 0.00684 mg/L and the March 9, 2022, which had a benzene analytical result of 0.00552 mg/L, which exceeds the WQCC GQS of 0.005 mg/L. This slight rise in concentration is indicative that the vacuum recovery events are successful in drawing the subsurface gas over to the Levey Well. Benzene concentrations over time are graphed and included in **Appendix A**, showing the significant decrease of benzene in the Levey Well over time.

Monitoring Well MW-1 and MW-2

The groundwater samples collected from monitoring well MW-1 did not exhibit benzene concentrations above the WQCC GQS of 0.005 mg/L. The groundwater samples collected from monitoring well MW-2 exhibited benzene concentrations ranging from 0.0141 mg/L to 0.0185 mg/L, which exceed the WQCC GQS of 0.005 mg/L.

All other VOC concentrations were either below the laboratory reporting limit or below the WQCC GQS protective concentrations. All laboratory reporting limits were below the WQCC GQS protective concentrations, indicating a lack of dissolved phase gas infiltration into the localized groundwater.

4.0 RECOMMENDATIONS

OXY has demonstrated over time that the SHU #290 and the surrounding oil and gas operations were and are not a contributor to the previous related pressure observed in the Levey Well. This has been demonstrated by over four months of readings (**Appendix D**) which show that the pressures and gas readings are very consistent with pre-injection background, including, but not limited to carbon dioxide. The plugging of the SHU #183 well has shown to be effective in discontinuing the source of free gas related to the Levey water well.

Based on verbal communication between OXY and NMOCD, OXY concurs with the following recommendations and/or requests from the NMOCD through the remainder of 2022:

- **Continue to remove free gas accumulations from the underlying red bed and groundwater-bearing zone on a bi-weekly basis to acceptable levels of removal to achieve compliance expectations. The air sampling process performed at the Levey Well will continue to be utilized, as described in Section 2.1;**
- **Continue to monitor the Levey Well and monitoring wells MW-1 and MW-2 utilizing daily pressure checks for significant changes in pressure, which could indicate a secondary source, until compliance of free gas removal is achieved; and**

- **Implement monthly sampling for water and air on the Levey Well and monitoring wells MW-1 and MW-2 beginning in 2023.**

5.0 REFERENCES

- GSI Environmental Inc. Preliminary Draft -Results of Water Supply Well Sampling and Investigation. November 2019. Hobbs New Mexico Municipal Code, Title 13.04.017. Accessed Sept. 2020.
- New Mexico Environment Department. 2018. 20.6.2 NMAC: Title 20 (Environmental Protection), Chapter 6 (Water Quality), Part 2 (Ground and Surface Water Protection). Amended December 11th, 2019.
- Nicholson, Jr. A. and A. Clebsch, Jr. 1961. Geology and Ground-Water Conditions in Southern Lea County, New Mexico. United States Geological Survey Ground-Water Report 6. Prepared in cooperation with the New Mexico Institute of Mining and Technology, State Bureau of Mines and Mineral Resources Division and the New Mexico State Engineer.
- Gorody, A.W., 2012. Factors affecting the variability of stray gas concentration and composition ingroundwater. Environ. Geosci. 19, 17–31. <https://doi.org/10.1306/eg.12081111013>.
- Molofsky, L.J., Richardson, S.D., Gorody, A.W., Baldassare, F., Connor, J.A., McHugh, T.E., Smith, A.P., Wylie, A.S., Wagner, T., 2018. Purging and other sampling variables affecting dissolved methane concentration in water supply wells. Sci. Total Environ. 618, 998-1007. <https://doi.org/10.1016/j.scitotenv.2017.09.077>.



APPENDIX A

Figures and Graphs



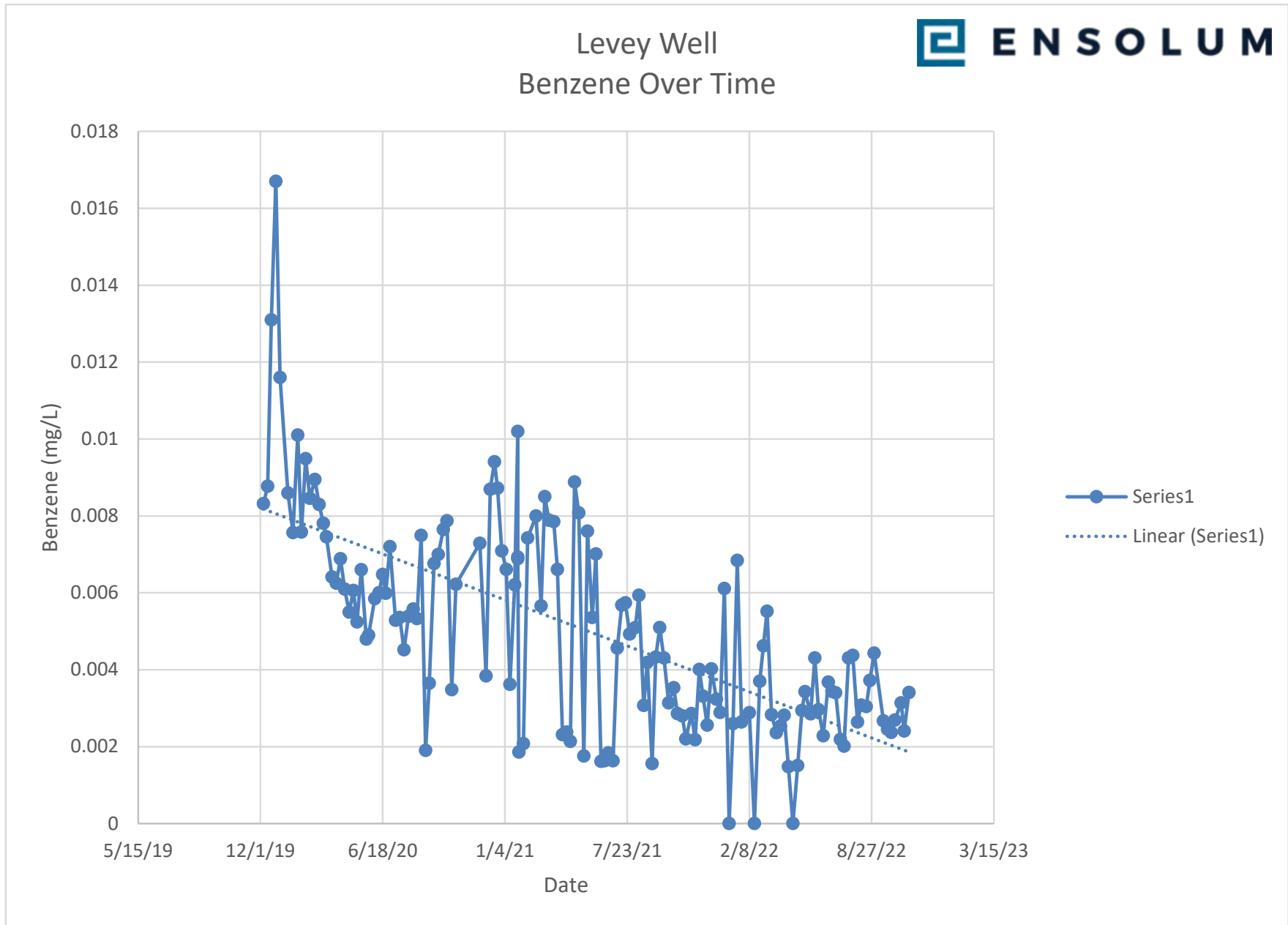
SITE MAP

PERMIAN EOR, INC
S HOBBS G/SA UNIT
SE ¼ of the NW ¼, Sec 5, T29S, R38E, Hobbs, New Mexico
32.690683° N, 103.173158° W

PROJECT NUMBER: 03B1417001

FIGURE

1





APPENDIX B

Tables



TABLE 1
GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY
Levey Well
Oxy Permian Ltd.
Hobbs, New Mexico
Ensolum Project No. 03B1417001 / 03B1417002

Sample Designation	Date	VOCs (mg/l)																											
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Tetrachloroeth(y)lene	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	1,2-Dichloropropane	cis-1,2-Dichloroeth(y)lene	1,4-Dichlorobenzene	1,1-Dichloropropene	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.005	0.1	NE	NE	NE	NE	0.005	0.005	NE	0.075	NE	NE	0.03	NE	0.01	0.1	NE	NE
Levey Well	12/6/2019	0.00832	0.0708	0.0296	0.0242	0.129	0.153	<0.0500	0.00151	0.00206	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00138	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0126	<0.0100	0.00566	<0.00100	<0.00100	0.0358	0.0106
	12/13/2019	0.00877	0.0654	0.0271	0.0233	0.121	0.144	<0.0500	0.00118	0.00171	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00112	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0112	<0.0100	0.00470	<0.00100	<0.00100	0.0315	0.00944
	12/19/2019	0.0131	0.0861	0.0385	0.0318	0.170	0.202	0.0125 J	0.00187	0.00257	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.00173	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0170	<0.00200	0.00747	<0.000228	<0.000162	0.0469	0.0144
	12/26/2019	0.0167	0.112	0.0514	0.0459	0.210	0.256	<0.0500	0.00211	0.00320	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00183	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0235	<0.0100	0.00934	<0.00100	<0.00100	0.0672	0.0168
	1/2/2020	0.0116	0.0644	0.0551	0.0805	0.232	0.313	<0.0500	0.00231	0.00164	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00127	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0107	0.0120	0.00544	<0.00100	0.00243	0.0377	0.0106
	1/15/2020	0.00860	0.0528	0.0318	0.0219	0.119	0.141	<0.0500	<0.00100	0.00259	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0148	<0.0100	0.0104	<0.00100	<0.00100	0.0547	0.0172
	1/23/2020	0.00757	0.0462	0.0318	0.0224	0.119	0.141	<0.0500	0.00233	0.00295	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00180	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0158	<0.0100	0.0166	<0.00100	<0.00100	0.103	0.0300
	1/31/2020	0.0101	0.0567	0.0462	0.0385	0.166	0.205	<0.500	<0.0100	<0.0100	0.0438	<0.00100	<0.0100	NA	0.0343	0.0344	<0.0100	<0.0100	<0.0500	<0.00100	<0.00100	0.0584	0.0262	<0.100	0.0458	<0.0100	<0.0100	0.323	0.0847
	2/6/2020	0.00758	0.0489	0.0306	0.0242	0.116	0.140	<0.0500	0.00234	0.00299	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00165	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0174	<0.0100	0.0237	<0.00100	<0.00100	0.285	0.0451
	2/13/2020	0.00949	0.0498	0.0397	0.0337	0.145	0.179	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00251	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0251	<0.0100	0.0450	<0.00100	<0.00100	0.349	0.0898
	2/20/2020	0.00846	0.0326	0.0313	0.0248	0.113	0.138	<0.0500	<0.00100	0.00407	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00229	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0208	<0.0100	0.0431	<0.00100	<0.00100	0.322	0.0918
	2/28/2020	0.00895	0.0351	0.0374	0.0251	0.124	0.149	<0.250	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	NA	<0.00500	<0.00500	<0.00500	<0.00500	<0.0250	<0.00500	<0.00500	<0.0250	0.0249	<0.0500	0.0488	<0.00500	<0.00500	0.358	0.0989
	3/6/2020	0.00830	0.0313	0.0346	0.0228	0.114	0.137	<0.0500	0.00374	0.00467	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00254	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0231	<0.0100	0.0472	<0.00100	<0.00100	0.378	0.0948
	3/13/2020	0.00781	0.0302	0.0330	0.0203	0.109	0.129	<0.0500	0.00153	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00247	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0224	<0.0100	0.0428	<0.00100	<0.00100	0.277	0.0875
	3/18/2020	0.00746	0.0279	0.0304	0.0174	0.0981	0.116	<0.0500	0.00311	0.00400	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00224	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0199	<0.0100	0.0365	<0.00100	<0.00100	0.275	0.0777
	3/27/2020	0.00641	0.0151	0.0247	0.0132	0.0737	0.0869	<0.0500	0.00122	0.00345	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00189	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0166	<0.0100	0.0336	<0.00100	<0.00100	0.261	0.0721
	4/3/2020	0.00625	0.0129	0.0250	0.0130	0.0745	0.0875	<0.0500	0.00120	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00209	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0174	<0.0100	0.0363	<0.00100	<0.00100	0.273	0.0756
	4/10/2020	0.00689	0.0327	0.0277	0.0159	0.0924	0.108	<0.0500	0.00253	0.00338	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00188	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0171	<0.0100	0.0300	<0.00100	<0.00100	0.264	0.0580
	4/17/2020	0.00610	0.0258	0.0253	0.0141	0.0814	0.0955	<0.0500	0.00238	0.00321	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00175	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0164	<0.0100	0.0280	<0.00100	<0.00100	0.220	0.0562
	4/24/2020	0.00550	0.0241	0.0225	0.0125	0.0756	0.0881	<0.0500	<0.00100	0.00297	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00179	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0148	<0.0100	0.0251	<0.00100	<0.00100	0.199	0.0526
	5/1/2020	0.00606	0.0277	0.0237	0.0129	0.0773	0.0902	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00159	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0143	<0.0100	0.0242	<0.00100	<0.0100	0.185	0.0513
	5/7/2020	0.00524	0.0168	0.0211	0.0108	0.0655	0.0763	<0.0500	<0.00100	0.00306	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00171	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0138	<0.0100	0.0270	<0.00100	<0.0100	0.202	0.0582
	5/14/2020	0.00660	0.0357	0.0268	0.0141	0.0882	0.102	<0.0500	0.00236	0.0.																			

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TABLE 1
GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY
Levey Well
Oxy Permian Ltd.
Hobbs, New Mexico
Ensolum Project No. 03B1417001 / 03B1417002

Sample Designation	Date	VOCs (mg/l)																											
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Tetrachloroeth(y)ene	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	1,2-Dichloropropane	cis-1,2-Dichloroeth(y)ene	1,4-Dichlorobenzene	1,1-Dichloropropene	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.005	0.1	NE	NE	NE	NE	0.005	0.005	NE	0.075	NE	NE	0.03	NE	0.01	0.1	NE	NE
Levey Well	1/6/2022	0.000940 J	0.00568	0.00394	0.00181	0.0134	0.0152	<0.00270	<0.000286	0.000577 J	<0.000195	0.000654 J	<0.000259	<0.000318	<0.000214	<0.000183	0.000397 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00213	<0.00200	0.00127	<0.000228	<0.000623	0.0168	0.00498
	1/12/2022	0.00260	0.0190	0.01020	0.00573	0.0381	0.0438	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000621 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00707	<0.00200	0.00273	<0.000228	<0.000623	0.0197	<0.000279
	1/19/2022	0.00684	0.0520	0.0252	0.0158	0.0980	0.114	0.00679 J	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00123	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0118	<0.00200	0.00592	<0.000228	<0.000623	0.0296	0.00947
	1/26/2022	0.00264	0.0206	0.0103	0.00604	0.0392	0.0452	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000568 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00507	<0.00200	0.00258	<0.000228	<0.000623	0.0139	0.00433
	2/2/2022	Unable to Sample due to Inclement Weather. Booster Pump for Levey Well Damaged by Freeze.																											
	2/8/2022	0.00288	0.0228	0.0122	0.00697	0.0458	0.0528	0.0112 J	<0.000286	0.00125	<0.000195	0.00194	<0.000259	<0.000318	<0.000214	<0.000183	0.000813 J	<0.000285	<0.000396	<0.000174	0.000211 J	<0.000481	0.00591	<0.00200	0.00329	<0.000228	<0.000623	0.0228	0.00693
	2/16/2022	0.000814 J	0.00676	0.00397	0.00212	0.0142	0.0163	<0.00270	<0.000286	<0.000199	<0.000195	0.00175	<0.000259	<0.000318	<0.000214	<0.000183	0.000336 J	<0.000285	0.000534 J	<0.000174	<0.000199	<0.000481	0.00202	<0.00200	0.00130	<0.000228	<0.000623	0.00924	0.00283
	2/25/2022	0.00370	0.0196	0.0133	0.00750	0.0489	0.0564	0.00976 J	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000696 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00626	<0.00200	0.00308	<0.000228	<0.000623	0.0131	0.00450
	3/3/2022	0.00462	0.0327	0.0162	0.00973	0.0634	0.0731	0.0180 J	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000710 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00731	<0.00200	0.00342	<0.000228	<0.000623	0.0140	0.00470
	3/9/2022	0.00552	0.0388	0.0204	0.0124	0.0768	0.0892	<0.00270	0.00169	0.00180	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00109	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00966	<0.00200	0.00484	<0.000228	<0.000623	0.0226	0.00720
	3/14/2022	Booster Pump for Levey Well Repaired and Back on Running Full Time.																											
	3/16/2022	0.00283	0.0227	0.0106	0.00619	0.0409	0.0471	<0.00270	<0.000286	0.000916 J	<0.000195	0.00174	<0.000259	<0.000318	<0.000214	<0.000183	0.000550 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00477	<0.00200	0.00238	<0.000228	<0.000623	0.0114	0.00388
	3/24/2022	0.00236	0.0178	0.00867	0.00491	0.0341	0.0390	<0.00270	0.000553 J	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000509 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00409	<0.00200	0.00208	<0.000228	<0.000623	0.0101	0.00323
	3/31/2022	0.00254	0.0197	0.00985	0.00574	0.0371	0.0428	0.00431 J	<0.000286	0.000932 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000605 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00482	<0.00200	0.00233	<0.000228	<0.000623	0.0121	0.00390
	4/6/2022	0.00282	0.0215	0.0106	0.00647	0.0405	0.0470	0.00381 J	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000581 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00491	<0.00200	0.00250	<0.000228	<0.000623	0.0125	0.00386
	4/13/2022	0.00148	0.0113	0.00559	0.00334	0.0211	0.0244	<0.00270	<0.000286	<0.000199	<0.000195	0.000531 J	<0.000259	<0.000318	<0.000214	<0.000183	0.000351 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00269	<0.00200	0.00153	<0.000228	<0.000623	0.00856	0.00264
	4/20/2022	0.000594 J	0.00776	0.00375	0.00212	0.0158	0.0179	<0.00270	<0.000286	0.000408 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000239 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00196	<0.00200	0.000651 J	<0.000228	<0.000623	0.00643	0.00156
	4/28/2022	0.00151	0.0112	0.00540	0.00323	0.0207	0.0239	<0.00270	<0.000286	0.000523 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00238	<0.00200	0.00133	<0.000228	<0.000623	0.00733	0.00242
	5/5/2022	0.00294	0.0275	0.0130	0.00761	0.0515	0.0591	<0.00270	<0.000286	0.00117	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000709 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00600	<0.00200	0.00265	<0.000228	<0.000623	0.0145	0.00440
	5/10/2022	0.00343	0.0282	0.0132	0.00821	0.0517	0.0599	<0.00270	<0.000286	0.00119	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000652 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00630	<0.00200	0.00301	<0.000228	<0.000623	0.0148	0.00463
	5/19/2022	0.00285	0.0228	0.0107	0.00633	0.0424	0.0487	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000527 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00521	<0.00200	0.00232	<0.000228	<0.000623	0.0102	0.00345
	5/26/2022	0.00431	0.0360	0.0171	0.0109	0.0679	0.0788	<0.00270	<0.000286	0.00153	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000918 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00840	<0.00200	0.00391	<0.000228	<0.000623	0.0182	0.00580
	6/1/2022	0.00296	0.0233	0.0107	0.00653	0.0423	0.0488	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000538 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00499	<0.00200	0.00212	<0.000228	<0.000623	0.00987	0.00337
	6/9/2022	0.00228	0.0182	0.00874	0.00514	0.0352	0.0403	<0.00270	0.000536 J	0.000776 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000539 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00436	<0.00200	0.00197	<0.000228	<0.000623	0.00847	0.00271
	6/17/2022	0.00368	0.0282	0.0141	0.00881	0.0544	0.0632	<0.00270	<0.000286	<0.000199																			



TABLE 1 GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001 / 03B1417002																													
Sample Designation	Date	VOCs (mg/l)																											
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethylene	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-isopropyltoluene)	1,2-Dichloroethane	1,2-Dichloropropane	cis-1,2-Dichloroethylene	1,4-Dichlorobenzene	1,1-Dichloropropane	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.005	0.1	NE	NE	NE	NE	0.005	0.005	NE	0.075	NE	NE	0.03	NE	0.01	0.1	NE	NE
MW-1	5/26/2020	0.000500 J	<0.000500	<0.000146	<0.000192	0.00215 J	0.00215	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.00101	0.0005 J
	6/30/2020	0.00275	<0.00100	<0.00100	<0.00100	0.0136	0.0136	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	<0.00100	<0.0100	<0.00100	<0.00100	<0.00100	0.00665	0.00271
	8/20/2020	0.00222	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	<0.00100	<0.0100	<0.00100	<0.00100	<0.00100	0.00388	0.00175
	10/23/2020	0.00353	<0.000367	<0.000657	<0.000642	0.00246 J	0.00246																						
	11/24/2020	0.00241	<0.000500	0.000310 J	<0.000192	0.00133 J	0.001330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.00151	0.000820 J
	12/18/2020	0.00257	<0.000500	0.000580 J	<0.000192	0.00145 J	0.00145	<0.00270	<0.000286	0.000350 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000270 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000320 J	<0.00200	0.000230 J	<0.000228	<0.000162	0.00234	0.00111
	12/23/2020	0.00159	<0.000500	0.000380 J	<0.000192	0.000970 J	0.000970 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.000720 J	0.000360 J
	12/30/2020	0.00194	<0.000500	0.000470 J	<0.000192	0.00148 J	0.00148	<0.00270	<0.000286	0.000230 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000240 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00154	0.000750 J
	1/6/2021	0.00209	<0.000500	0.000330 J	<0.000192	0.00122 J	0.00122	<0.00270	<0.000286	0.000310 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000260 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000190 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00219	0.00103
	1/12/2021	0.00211	0.000690 J	0.000540 J	<0.000192	0.00163 J	0.00163	<0.00270	<0.000286	0.000220 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000200 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00143	0.000670 J
	1/20/2021	0.00222	<0.000500	0.000430 J	<0.000192	0.00137 J	0.00137	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000210 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00140	0.000720 J
	1/27/2021	0.00157	<0.000500	0.000400 J	<0.000192	0.00123 J	0.00123	0.00398 J	<0.000286	0.000270 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000210 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00153	0.000830 J
	2/3/2021	0.00203	<0.000500	0.000430 J	<0.000192	0.00100 J	0.00100 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000180 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00105	0.000510 J
	2/10/2021	0.00196	<0.000500	0.000560 J	<0.000192	0.00143 J	0.00143	<0.00575	<0.000286	0.000240 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000300 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00143	0.000740 J
	2/24/2021	0.00158	<0.000500	0.000460 J	<0.000192	0.00110 J	0.0011	<0.00575	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000210 J	<0.00200	<0.000179	<0.000228	<0.000162	0.000930 J	0.000490 J
	3/4/2021	0.00139	<0.000500	0.00102	<0.000192	0.00211 J	0.00211	<0.00575	<0.000286	0.000240 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000440 J	<0.00200	0.000240 J	<0.000228	<0.000162	0.00131	0.000680 J
	3/10/2021	0.00143	<0.000500	0.000490 J	<0.000192	0.000900 J	0.000900 J	<0.00575	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000200 J	<0.00200	<0.000179	<0.000228	<0.000162	0.000780 J	0.000370 J
	3/17/2021	0.00159	0.00112	0.000790 J	<0.000192	0.00183 J	0.00183	<0.00575	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.000380 J	<0.00200	0.000230 J	<0.000228	<0.000162	0.00145	0.000570 J
	3/25/2021	0.00159	<0.00100	0.000533 J	<0.00100	0.00123 J	0.00123 J	<0.0500	<0.00100	0.000214 J	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.0.						

Sample Designation	Date	VOCs (mg/l)																												
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Tetrachloroeth(y)lene	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	1,2-Dichloropropane	cis-1,2-Dichloroeth(y)lene	1,4-Dichlorobenzene	1,1-Dichloropropene	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.005	0.1	NE	NE	NE	NE	0.005	0.005	NE	0.075	NE	NE	0.03	NE	0.01	0.1	NE	NE	
MW-1	12/22/2021	<0.000214	<0.000500	<0.000515	<0.000192	<0.000330	<0.000330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	<0.000252	<0.000279	
	12/29/2021	<0.000214	<0.000500	<0.000515	<0.000192	<0.000330	<0.000330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	<0.000252	<0.000279	
	1/6/2022	<0.000214	<0.000500	<0.000515	<0.000192	<0.000330	<0.000330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	<0.000252	<0.000279	
	1/12/2022	<0.000214	<0.000500	<0.000515	<0.000192	<0.000330	<0.000330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000396	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	<0.000252	<0.000279	
	1/19/2022	<0.000214	<0.000500	<0.000515	<0.000192	0.000640 J	0.000640 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000396	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	0.000414 J	<0.000279	
	1/26/2022	<0.000214	<0.000500	<0.000515	<0.000192	<0.000330	<0.000330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000259	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	0.000623	<0.000252	<0.000279	
	2/2/2022		Unable to Sample due to Incident Weather. Booster Pump for Levey Well Damaged by Freeze.																											
	2/8/2022	<0.000214	<0.000500	<0.000515	<0.000192	<0.000330	<0.000330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	0.000799 J	<0.000214	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	<0.000252	<0.000279	
	2/16/2022	<0.000214	<0.000500	<0.000515	<0.000192	<0.000330	<0.000330	<0.00270	<0.000286	<0.000199	<0.00019																			

TABLE 1
GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY
Levey Well
Oxy Permian Ltd.
Hobbs, New Mexico
Ensolum Project No. 03B1417001 / 03B1417002

Sample Designation	Date	VOCs (mg/l)																												
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Tetrachloroeth(y)lene	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	1,2-Dichloropropane	cis-1,2-Dichloroeth(y)lene	1,4-Dichlorobenzene	1,1-Dichloropropene	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.005	0.1	NE	NE	NE	NE	0.005	0.005	NE	0.075	NE	NE	0.03	NE	0.01	0.1	NE	NE	
MW-2	5/26/2020	0.00901	0.0299	0.0069	0.0186	0.0545	0.0731	<0.00270	<0.000286	0.000270 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000660	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00223	<0.00200	0.000570 J	<0.000228	<0.000162	0.0125	0.00704	
	6/30/2020	0.0124	0.0193	0.0187	0.0196	0.0903	0.110	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.00667	<0.0100	0.00243	<0.00100	<0.00100	0.0231	0.00815	
	8/20/2020	0.0148	0.0172	0.0182	0.0160	0.0802	0.0962	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.00640	<0.0100	0.00170	<0.00100	<0.00100	0.0145	0.00421	
	10/23/2020	0.0250	0.00730	0.0248	0.0186	0.110	0.129	NA	NA																					
	11/24/2020	0.0358	0.0613	0.0503	0.0465	0.221	0.2675	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.00143	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0189	0.00242 J	<0.000179	<0.000228	<0.000162	0.0590	0.0149	
	12/18/2020	0.0263	0.0260	0.0369	0.0240	0.165	0.189	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.00113	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0148	<0.00200	0.00486	<0.000228	<0.000162	0.0467	0.0121	
	12/23/2020	0.0299	0.0358	0.0381	0.0266	0.156	0.183	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.00101	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0135	<0.00200	0.00408	<0.000228	<0.000162	0.0406	0.0102	
	12/30/2020	0.0200	0.0242	0.0185	0.0146	0.0592	0.0738	<0.00270	0.000550 J	0.000680 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000540 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00603	<0.00200	0.00170	<0.000228	<0.000162	0.0116	0.00533	
	1/6/2021	0.0200	0.0169	0.0231	0.0169	0.118	0.135	<0.00270	0.000390 J	0.00117	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.00105	0.000500 J	<0.000396	<0.000174	<0.000199	<0.000481	0.00815	<0.00200	0.00267	0.000800 J	<0.000162	0.0339	0.0103	
	1/12/2021	0.0193	0.0185	0.0198	0.0144	0.0922	0.107	<0.00270	0.000690 J	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000710 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00756	<0.00200	0.00242	<0.000228	<0.000162	0.0259	0.00698	
	1/20/2021	0.0229	0.0169	0.0190	0.0136	0.0829	0.0965	0.00394 J	0.000400 J	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000470 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00640	<0.00200	0.00177	<0.000228	<0.000162	0.0202	0.00517	
	1/27/2021	0.0298	0.0276	0.0282	0.0269	0.155	0.182	0.00504 J	0.00103	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.00116	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0117	<0.00200	0.00343	<0.000228	<0.000162	0.0500	0.0129	
	2/3/2021	0.0286	0.0392	0.0258	0.0236	0.111	0.135	<0.00270	<0.000286	0.000850 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000590 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00817	<0.00200	0.00240	<0.000228	<0.000162	0.0267	0.00674	
	2/10/2021	0.0307	0.0201	0.0329	0.0210	0.159	0.180	<0.00575	0.000870 J	<0.000199	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000940 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0120	<0.00200	0.00331	<0.000228	<0.000162	0.0407	0.00994	
	2/24/2021	0.0218	0.0122	0.0164	0.0111	0.0749	0.086	<0.00575	0.000370 J	0.000640 J	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000480 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0060	<0.00200	0.00175	<0.000228	<0.000162	0.0191	0.00496	
	3/4/2021	0.0264	0.0232	0.0320	0.0212	0.142	0.163	<0.00575	0.000430 J	0.00131	<0.000195	<0.000500	<0.000259	NA	<0.000214	<0.000183	0.000930 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0115	<0.00200	0.00390	<0.000228	<0.000162	0.0403	0.0100	
	3/10/2021	0.0269	0.0234	0.0271	0.0206	0.117	0.138	<0.00575	<0.000286	0.000970 J	<0.000195	<0.00100	<0.000259	NA	<0.000214	<0.000183	0.000720 J	<0.000285	<0.00500	<0.000174	<0.00100	<0.000481	0.00931	<0.00200	0.00281	<0.000228	<0.000162	0.0287	0.00720	
	3/17/2021	0.0238	0.0237	0.0257	0.0190	0.113	0.132	<0.0500	<0.00100	0.00113	<0.000199	<0.00100	<0.000259	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500	<0.00100	<0.00100	<0.00500	0.00923	<0.0100	0.00305	<0.00100	<0.00100	0.0315	0.00821
	3/25/2021	0.0209	0.0281	0.0202	0.0165	0.0892	0.106	<0.0500	<0.00100	0.000799 J	0.00134	<0.00100	<0.00100	<0.0100	<0.00100	<0.00100	0.000610 J	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500	0.00725	<0.0100	0.00229	<0.00100	<0.00100	0.0224	<0.00100	
	3/31/2021	0.0298	0.0107	0.0177	0.0203	0.124	0.144	<0.00270	<0.000286	0.00137	<0.000195	<0.000500	<0.00100	<0.0100	0.00151	<0.000183	0.00109	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0133	<0.00200	0.00295	<0.000228	0.000631 J	0.0426	0.0107	
	4/8/2021	0.0226	0.0217	0.0210	0.0175	0.0990	0.117	<0.00270	0.000640 J	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000579 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00799	<0.						

TABLE 1
GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY
Levey Well
Oxy Permian Ltd.
Hobbs, New Mexico
Ensolum Project No. 03B1417001 / 03B1417002

Sample Designation	Date	VOCs (mg/l)																											
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Tetrachloroeth(y)lene	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	1,2-Dichloropropane	cis-1,2-Dichloroeth(y)lene	1,4-Dichlorobenzene	1,1-Dichloropropene	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.005	0.1	NE	NE	NE	NE	0.005	0.005	NE	0.075	NE	NE	0.03	NE	0.01	0.1	NE	NE
MW-2	1/6/2022	0.0360	0.00656	0.0309	0.0229	0.253	0.274	<0.00270	0.00192	0.00273	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00265	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0208	<0.00200	0.00488	<0.000228	<0.000623	0.108	0.0273
	1/12/2022	0.0205	0.00174	0.00106	0.0200	0.0949	0.115	<0.00270	<0.000286	0.00132	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00184	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00521	<0.00200	0.000546 J	<0.000228	<0.000623	0.0619	0.00491
	1/19/2022	0.0262	0.00733	0.0305	0.0147	0.229	0.249	<0.00270	0.00104	0.00147	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00116	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0142	<0.00200	0.00403	<0.000228	<0.000623	0.0435	0.0115
	1/26/2022	0.0331	0.00488	0.0137	0.00718	0.0755	0.0827	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000314 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00555	<0.00200	0.00112	<0.000228	<0.000623	0.0145	0.00380
	2/2/2022	Unable to Sample due to Inclement Weather. Booster Pump for Levey Well Damaged by Freeze.																											
	2/8/2022	0.0184	0.00572	0.0133	0.00676	0.0653	0.0721	<0.00270	<0.000286	0.000510 J	<0.000195	<0.000500	<0.000259	0.00165 J	<0.000214	<0.000183	0.000391 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00544	<0.00200	0.00149	<0.000228	<0.000623	0.0150	0.00409
	2/16/2022	0.0357	0.0270	0.0391	0.0307	0.205	0.244	<0.00270	<0.000286	0.00119	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000884 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0127	<0.00200	0.00392	<0.000228	<0.000623	0.0393	0.0103
	2/25/2022	0.0341	0.00559	0.0206	0.0111	0.134	0.145	<0.00270	<0.0000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000996 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0114	<0.00200	0.00295	<0.000228	<0.000623	0.0386	0.00997
	3/3/2022	0.0370	0.00673	0.0378	0.0160	0.225	0.244	<0.00270	<0.0000286	0.00153	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00117	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0152	<0.00200	0.00456	<0.000228	<0.000623	0.0496	0.0126
	3/9/2022	0.0182	0.00790	0.0186	0.0131	0.0857	0.0988	<0.00270	<0.0000286	0.000910 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000683 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00640	<0.00200	0.00211	<0.000228	<0.000623	0.0240	0.00659
	3/14/2022	Booster Pump for Levey Well Repaired and Back on Running Full Time.																											
	3/16/2022	0.0200	0.00793	0.0209	0.0133	0.0947	0.108	<0.00270	<0.0000286	0.000759 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000524 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00753	<0.00200	0.00212	<0.000228	<0.000623	0.0216	0.00583
	3/24/2022	0.0400	0.0151	0.0490	0.0321	0.252	0.284	<0.00270	0.00104	0.00192	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00135	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0208	<0.00200	0.00487	<0.000228	<0.000623	0.0679	0.0170
	3/31/2022	0.0305	0.0309	0.0274	0.0311	0.267	0.311	<0.00270	0.00102	0.00142	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00138	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00896	<0.00200	0.00203	<0.000228	<0.000623	0.0551	0.0138
	4/6/2022	0.0303	0.0170	0.0140	0.0228	0.191	0.218	<0.00270	0.000939 J	0.00104	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00128	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00534	<0.00200	0.00110	<0.000228	<0.000623	0.0517	0.0136
	4/13/2022	0.0303	0.0271	0.0235	0.0218	0.135	0.157	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000812 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00770	<0.00200	0.00212	<0.000228	<0.000623	0.0368	0.00937
	4/20/2022	0.0246	0.0126	0.0157	0.0171	0.0994	0.117	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000513 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00439	<0.00200	0.000555 J	<0.000228	<0.000623	0.0224	0.00580
	4/28/2022	0.0384	0.0164	0.0617	0.0403	0.292	0.333	<0.00270	0.00162	0.00214	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00176	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0222	<0.00200	0.00675	<0.000228	<0.000623	0.0872	0.0220
	5/5/2022	0.0181	0.00219	0.0172	0.00988	0.110	0.120	<0.00270	0.000629 J	0.000796 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000733 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00608	<0.00200	0.00123	<0.000228	<0.000623	0.0276	0.00751
	5/10/2022	0.0197	0.00422	0.0184	0.0142	0.129	0.143	<0.00270	<0.000286	0.000957 J	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000953 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00681	<0.00200	0.00180	<0.000228	<0.000623	0.0367	0.00949
	5/19/2022	0.0329	0.00659	0.0505	0.0254	0.367	0.407	<0.00270	0.00159	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00163	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0196	<0.00200	0.00593	<0.000228	<0.000623	0.0645	0.0173
	5/26/2022	0.0238	0.00151	0.0208	0.00782	0.105	0.113	<0.00270	0.000780 J	0.00102	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000846 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00912	<0.00200	0.00268	<0.000228	<0.000623	0.0317	0.00846
	6/1/2022	0.0387	0.00639	0.0414	0.0212	0.230	0.253	<0.00270	<0.000286	0.00172	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00147	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0156	<0.00200	0.00395	<0.000228	<0.000623	0.0573	0.0153
	6/9/2022	0.0194	0.00241	0.0228	0.0102	0.118	0.128	<0.00270	<0.000286	0.00124	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00104	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0108	<0.00200	0.00304	<0.000228	<0.000623	0.0356	0.00926
	6/17/2022	0.0214	0.00267	0.0262	0.00984	0.126	0.136	<0.00270	0.00115	0.00161	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.00139	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0132	<0.00200	0.00436	<0.000228	<0.000623	0.0490	0.0130
	6/23/2022	0.0235	0.00355	0.0311	0.0139	0.139	0.153	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183</													



TABLE 2 GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001 / 03B1417002																
Sample Designation	Date	(mg/l)														pH
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Cation-Anion Balance	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9
Levey Well	12/6/2019	<0.500	253	<0.500	0.594	0.199	61.5	405	65.0	5.27	83.7	1,680	1,260	<4.00	2.70	6.45
	12/13/2019	<0.500	315	<0.500	0.744	0.222	72.9	450	80.1	6.71	110	1,900	1,230	<4.00	2.00	7.02
	12/19/2019	0.414 J	311	0.381 J	0.539	<0.0293	62.9	411	72.2	5.61	101	1,640	1,140	<4.00	0.200	6.57
	12/26/2019	<0.500	257	<0.500	0.617	0.204	61.7	418	68.8	5.82	88.5	1,760	1,280	<4.00	1.30	6.44
	1/2/2020	<0.500	302	<0.500	0.331	<0.100	60.6	375	70.5	5.96	98.8	1,630	1,150	<4.00	2.40	6.83
	1/15/2020	<0.500	190	0.559	0.129	0.930	53.5	401	66.8	4.82	82.9	1,570	1,260	<4.00	0	6.35
	1/23/2020	<0.500	195	0.617	0.126	0.128	46.2	426	76.3	8.84	86.4	1,530	1,230	<4.00	1.60	6.21
	1/31/2020	<0.500	197	0.616	0.129	<0.100	48.5	446	79.1	7.43	89.5	1,440	1,230	<4.00	3.20	6.15
	2/6/2020	<0.500	316	<0.500	0.179	<0.100	64.2	430	76.0	7.60	101	1,100	1,180	<4.00	1.10	6.07
	2/13/2020	<2.50	293	0.623	0.178	<0.500	57.3	409	74.5	6.80	95.7	1,640	1,200	<4.00	0.300	6.04
	2/20/2020	<0.500	272	0.586	0.157	<0.100	49.6	421	71.4	6.38	91.4	1,690	1,220	<4.00	0.300	5.93
	2/28/2020	<0.500	307	<0.500	1.05	1.35	56.6	438	74.0	5.98	97.4	1,620	1,230	<4.00	0.400	6.12
	3/6/2020	<0.500	284	0.621	0.107	1.27	56.2	418	67.9	5.60	92.7	1,880	1,230	<4.00	0.800	6.26
	3/13/2020	<0.500	316	0.629	<0.100	<0.100	59.3	393	63.3	5.32	91.2	1,770	1,200	<4.00	4.30	6.23
	3/18/2020	0.533	332	0.642	0.128	<0.100	63.5	391	67.4	5.56	95.7	1,680	1,180	<4.00	3.80	6.44
	3/27/2020	0.533	324	0.728	<0.100	<0.100	57.6	418	70.3	5.91	105	1,610	1,180	<4.00	0.200	6.57
	4/3/2020	<0.500	304	0.807	0.110	<0.100	57.3	417	69.0	5.91	101	1,960	1,180	<4.00	0.200	6.37
	4/10/2020	0.575	351	0.612	0.172	<0.100	61.8	431	72.3	6.17	104	1,930	1,190	<4.00	0.600	6.73
	4/17/2020	0.590	353	0.691	0.165	<0.100	59.7	406	73.2	5.40	108	1,750	1,180	<4.00	1.70	6.51
	4/24/2020	0.595	370	0.723	0.152	<0.100	61.2	408	75.2	5.55	113	1,810	1,130	<4.00	0.600	6.32
	5/1/2020	0.576	376	0.686	0.140	<0.100	61.8	402	74.6	5.39	106	1,750	1,130	<4.00	1.90	6.37
	5/7/2020	0.517	365	0.675	0.163	<0.100	58.8	425	70.5	5.57	108	1,640	1,140	<4.00	0.00	6.55
	5/14/2020	0.571	409	0.585	0.160	<0.100	56.0	412	76.5	6.23	107	1,900	1,200	<4.00	3.70	6.34
	5/22/2020	0.531	319	0.561	1.550	<0.100	30.1	354	63.7	5.24	97.4	1,360	1,190	<4.00	6.10	6.54
	5/26/2020	0.549	357	0.688	0.153	<0.100	44.5	356	69.6	5.67	102	1,650	1,170	<4.00	6.30	6.42
	6/5/2020	0.640	417	0.535	0.139	<0.100	39.9	379	73.3	5.92	108	1,670	1,160	<4.00	5.90	6.30
	6/12/2020	0.602	359	0.697	0.145	<0.100	43.9	386	72.4	6.70	106	1,670	1,140	<4.00	2.40	6.22
	6/18/2020	0.576	431	<5.00	0.144	<0.100	39.5	418	78.8	6.23	115	1,800	1,180	<4.00	2.40	6.28
	6/23/2020	0.586	398	<5.00	0.136	<0.100	33.3	361	66.3	5.48	98.2	1,920	1,190	<4.00	8.40	6.23
	6/30/2020	0.695	431	<5.00	0.149	<0.100	37.9	437	78.6	6.70	113	1,830	1,170	<4.00	2.60	6.39
	7/9/2020	0.647	413	<5.00	0.147	0.215	40.5	421	78.5	6.58	114	1,790	1,170	<4.00	1.50	6.37
	7/16/2020	0.657	390	<5.00	0.128	<0.100	40.6	402	77.6	7.01	114	1,890	1,170	<4.00	1.90	6.34
	7/23/2020	0.621	396	<5.00	0.175	0.169	36.5	419	74.0	6.58	111	2,000	1,160	<4.00	1.10	6.22
	7/30/2020	0.669	390	0.625	0.181	<0.100	39.3	397	71.4	5.59	103	1,910	1,170	<4.00	3.70	6.18
	8/7/2020	0.631	387	0.526	0.186	1.75	36.1	404	79.5	6.73	111	1,810	1,150	<4.00	0.900	6.12
	8/13/2020	0.713	408	0.505	0.191	1.45	34.9	368	75.1	6.54	115	1,980	1,150	<4.00	5.00	6.26
	8/20/2020	0.690	449	<0.500	0.164	<0.100	38.7	389	69.0	5.99	113	2,000	1,090	<4.00	4.40	6.18
	8/27/2020	0.846	582	<0.500	0.158	1.68	49.4	446	82.6	7.17	161	2,570	973	<4.00	1.50	6.35
	9/2/2020	0.868	635	<0.500	0.159	<0.100	48.1	422	77.9	7.25	168	1,620	1,030	<4.00	3.40	6.30
	9/10/2020	0.714	499	<0.500	<0.100	1.61	41.9	387	79.4	6.53	133	1,980	1,090	<4.00	4.20	6.10
	9/17/2020	0.769	472	<0.500	0.272	1.06	40.8	467	73.4	6.45	119	1,930	1,110	<4.00	1.10	6.14
	9/25/2020	0.779	541	<0.500	0.150	<0.100	44.0	386	75.9	5.86	133	1,680	1,110	<4.00	6.70	6.17
	10/1/2020	0.721	466	<0.500	0.173	<0.100	41.4	398	75.5	6.25	124	1,940	1,110	<4.00	3.30	6.07
	10/9/2020	0.786	527	<0.500	0.161	<0.100	43.8	426	79.8	6.90	139	2,220	1,090	<4.00	1.90	6.21
	10/16/2020	0.595	460	0.511	<0.100	<2.00	45.7	376	72.5	5.90	122	2,020	1,080	<4.00	4.80	6.20
	11/24/2020	0.817	572	<0.500	0.124	2.07	37.5	438	79.6	6.56	141	2,200	1,100	<4.00	2.60	6.45
	12/4/2020	0.687	706	<0.500	0.142	3.27	30.9	405	75.8	7.09	143	2,000	1,050	<4.00	9.30	6.33
	12/11/2020	0.816	487	0.949	0.197	1.80	33.4	445	82.0	6.90	133	1,990	1,160	<4.00	0.200	6.20
12/18/2020	0.763	497	<5.00	0.129	1.87	37.6	424	79.5	6.97	137	1,910	1,180	<4.00	2.70	6.39	
12/23/2020	0.613	477	<5.00	0.108	<0.100	38.3	416	78.2	7.82	129	1,800	1,290	<4.00	5.70	6.22	
12/30/2020	0.712	493	<0.500	<0.100	<0.100	40.1	448	80.0	6.21	139	2,120	1,340	<4.00	4.40	6.14	
1/6/2021	0.784	504	<0.500	0.155	2.61	23.0	400	79.8	6.14	135	2,210	1,340	<4.00	8.10	6.27	
1/12/2021	0.605	326	<0.500	0.137	1.05	<0.500	324	64.3	5.68	97.8	1,680	1,160	<4.00	7.00	6.57	
1/20/2021	0.796	486	<0.500	0.138	<0.100	7.68	397	73.0	6.00	127	2,170	1,200	<4.00	5.70	6.24	
1/27/2021	0.510	264	0.905	0.137	1.16	23.1	296	55.1	4.75	83.1	1,350	875	<4.00	1.70	6.38	
2/3/2021	0.501	275	0.842	0.122	1.02	20.5	329	59.0	4.76	89.4	1,370	940	<4.00	0.00	6.37	
2/10/2021	0.615	561	<0.500	0.147	0.308	24.9	416	77.9	7.03	156	1,980	1,170	<4.00	4.50	6.31	
2/24/2021	0.695	576	<0.500	0.163	2.6	31.4	450	81.3	7.94	164	2,260	1,190	<4.00	2.50	6.22	
3/4/2021	0.789	585	<0.500	0.121	0.215	54.1	425	77.8	6.41	151	2,090	1,050	<4.00	3.00	6.34	
3/10/2021	0.756	540	<0.500	0.147	<0.100	45.5	417	76.3	5.54	139	1,940	1,160	<4.00	5.10	6.29	
3/17/2021	0.813	519	1.21	0.169	<0.100	33.8	436	71.3	6.10	127	1,910	1,200	<4.00	4.70	5.97	
3/25/2021	<10.0	529	<10.0	<2.00	1.99 J	20.2	435	78.0	7.14	136	2,320	1,250	<4.00	-10.80	6.6	
3/31/2021	0.785	499	0.358 J	0.130	<0.0293	16.5	416	74.3	6.73	132	1,650	1,150	<4.00	-9.18	6.4	
4/8/2021	<0.500	254	0.869	<0.100	0.121	23.3	271	46.7	5.00	74.5	1,120	785	<4.00	-9.60	6.5	
4/15/2021	0.545	253	0.939	<0.100	<0.100	34.1	283	53.5	4.66	82.8	998	793	<4.00	-7.22	6.5	
4/21/2021	0.460 J	253	0.729	0.125	<0.0293	9.23	278	52.4	4.83	81.4	1,210	869	<4.00	-10.1	6.4	
4/28/2021	0.841	497	0.196 J	0.133	<0.0293	21.2	416	75.8	6.88	133	2,000	1,290	<4.00	-12.5</		



TABLE 2 GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001 / 03B1417002																
Sample Designation	Date	(mg/l)													%	SU
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Cation-Anion Balance	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9
Levey Well	6/2/2021	0.712	488	0.303 J	0.128	<0.0293	23.7	447	82.8	7.43	139	2,140	1,120	<4.00	-4.83	6.3
	6/10/2021	0.415 J	247	1.10	0.124	1.38	22.2	273	54.9	4.90	84.8	1,270	669	<4.00	-2.53	6.5
	6/16/2021	0.405 J	227	0.946	0.125	<0.0293	11.5	267	56.0	4.64	84.4	1,500	723	<4.00	-3.70	6.7
	6/22/2021	0.405 J	230	1.00	0.117	1.67	28.9	298	53.1	4.74	80.7	1,230	657	<4.00	0.795	6.7
	6/30/2021	0.398 J	237	1.07	0.140	0.205	23.8	258	51.9	4.32	74.6	1,200	676	<4.00	-5.560	6.9
	7/1/2021	Levey Well Now Running Full Time														
	7/7/2021	0.469 J	305	0.705	0.128	<0.0293	41.3	337	67.2	5.46	96.3	1,780	764	<4.00	-0.751	6.6
	7/14/2021	0.446 J	297	0.753	0.151	0.167	41.6	323	61.9	4.56	87.0	1,200	785	<4.00	-3.73	6.4
	7/20/2021	0.180 J	290	0.223 J	0.0457 J	<0.0293	38.2	317	65.9	5.31	96.1	1,620	854	<4.00	-5.11	6.4
	7/27/2021	0.437 J	281	0.491 J	0.126	1.42	41.3	338	66.9	5.14	95.9	1,240	790	<4.00	-0.522	6.2
	8/5/2021	0.400 J	275	0.565	0.158	<0.0293	43.3	334	68.8	5.00	90.9	1,610	714	<4.00	2.12	6.6
	8/11/2021	0.446 J	261	0.512	0.154	1.81	43.2	298	64.8	4.96	89.8	1,470	764	<4.00	-3.46	6.4
	8/19/2021	0.583	380	0.357 J	0.177	0.694	39.1	336	68.2	6.69	111	2,030	769	<4.00	-3.85	6.6
	8/25/2021	0.483 J	249	0.680	0.125	1.13	41.4	305	59.6	4.65	83.9	1,050	698	<4.00	-0.532	6.6
	9/2/2021	0.418 J	233	0.688	0.110	0.147	20.1	287	52.2	3.98	75.2	1,140	588	<4.00	2.27	7.0
	9/8/2021	0.357 J	257	0.442 J	0.0997 J	1.20	43.4	300	61.8	4.83	87.3	1,360	703	<4.00	-1.15	6.6
	9/14/2021	0.372 J	250	0.511	0.118	1.11	42.3	285	58.7	4.81	81.7	988	730	<4.00	-4.44	6.4
	9/21/2021	0.546	227	0.951	0.224	<0.0293	37.4	313	68.2	5.30	97.5	1,080	610	<4.00	7.72	6.6
	9/29/2021	0.535	248	0.542	0.186	0.164	41.9	302	59.9	4.60	85.4	1,410	765	<4.00	-2.94	6.6
	10/7/2021	0.454 J	235	0.582	1.10	<0.0293	40.5	323	65.5	4.79	88.3	1,310	765	<4.00	0.449	6.6
	10/13/2021	0.459 J	238	0.608	0.198	1.10	40.9	252	52.7	3.97	75.6	1,030	765	<4.00	-10.6	6.7
	10/21/2021	0.470 J	227	0.557	0.143	<0.0293	36.9	238	51.0	3.54	72.5	1,250	722	<4.00	-10.2	6.5
	10/27/2021	0.444 J	238	0.469 J	0.193	0.0910 J	42.5	330	67.2	5.31	94.2	1,290	706	<4.00	3.95	6.7
	11/5/2021	0.367 J	231	1.45	0.220	<0.0293	41.7	328	63.6	5.06	90.7	1,050	657	<4.00	5.76	6.9
	11/11/2021	0.379 J	229	0.594	0.238	<0.0293	36.9	221	48.1	3.36	71.5	1,140	571	<4.00	-5.92	7.0
	11/18/2021	0.560	247	0.397 J	0.176	<0.0293	44.3	276	50.8	4.29	76.4	1,350	698	<4.00	-5.71	6.6
	11/24/2021	0.455 J	232	0.646	0.203	0.718	41.9	253	52.5	4.07	76.6	1,240	546	<4.00	-0.200	6.6
	12/1/2021	0.497 J	233	0.652	0.144	<0.0293	42.0	284	55.9	4.31	82.4	1,040	644	<4.00	-0.133	6.9
	12/8/2021	0.516	230	0.620	0.187	<0.0293	42.5	261	55.8	4.20	82.9	1,200	633	<4.00	-1.56	6.5
	12/16/2021	0.490 J	228	0.528	0.251	<0.0293	42.1	282	55.3	4.13	81.9	1,280	649	<4.00	-0.883	6.4
	12/22/2021	0.480 J	230	0.294 J	0.223	<0.0293	43.3	304	58.5	4.66	85.8	1,270	619	<4.00	3.67	6.4
	12/29/2021	0.476 J	225	0.588	0.224	<0.0293	43.8	300	57.5	4.69	84.9	1,220	657	<4.00	1.62	6.6
	1/6/2022	0.386 J	226	0.500	0.182	<0.0293	42.7	278	52.9	4.11	79.0	1,650	711	<4.00	-4.09	6.4
	1/12/2022	0.438 J	223	0.561	0.178	<0.0293	42.8	254	49.2	3.60	71.9	1,090	633	<4.00	-4.90	6.1
	1/19/2022	0.446 J	223	0.523	0.178	<0.0293	43.6	288	57.2	4.34	80.1	1,780	688	<4.00	-1.41	6.3
	1/26/2022	0.440 J	220	0.580	0.181	0.0834 J	41.7	286	56.4	4.50	85.1	1,140	706	<4.00	-1.64	6.4
	2/2/2022	Unable to Sample due to Inclement Weather. Booster Pump for Levey Well Damaged by Freeze.														
	2/8/2022	0.780	329	1.24	<0.0391	0.420	62.0	272	58.5	4.77	97.0	1,410	756	<4.00	-11.40	6.5
	2/16/2022	0.488 J	217	0.769	0.0551 J	0.349	27.9	212	46.2	3.76	74.5	1,070	555	<4.00	-6.59	6.6
	2/25/2022	0.726	484	0.902	0.141	<0.0293	31.2	429	78.2	6.80	139	1,960	1,210	<4.00	-9.05	6.4
	3/3/2022	0.606	380	1.76	0.220	0.175	39.8	410	78.2	7.36	137	2,130	1,190	<4.00	-6.76	6.3
	3/9/2022	0.507	355	1.10	0.147	<0.0293	42.6	422	79.4	7.55	129	1,820	1,160	<4.00	-4.98	6.3
	3/14/2022	Booster Pump for Levey Well Repaired and Back on Running Full Time.														
	3/16/2022	0.380 J	229	0.464 J	0.208	<0.0293	42.2	258	55.9	4.48	85.6	1,190	673	<4.00	-4.29	6.4
	3/24/2022	0.539	230	0.709	<0.0391	<0.0293	43.4	252	51.3	4.07	81.5	1,390	644	<4.00	-4.80	6.5
	3/31/2022	0.515	223	0.690	0.239	<0.0293	44.0	245	52.7	3.79	77.2	1,220	641	<4.00	-5.18	6.4
	4/6/2022	0.540	218	0.868	0.0931 J	<0.0293	42.4	256	50.3	3.90	76.6	1,220	619	<4.00	-2.94	6.4
4/13/2022	0.400 J	212	0.773	0.111	<0.0293	42.0	256	51.3	3.87	74.5	1,200	650	<4.00	-3.94	6.6	
4/20/2022	0.496 J	218	0.651	0.268	<0.0293	44.6	238	48.7	4.05	75.0	1,260	686	<4.00	-8.77	6.6	
4/28/2022	0.477 J	214	0.690	0.104	<0.0293	43.2	272	55.4	4.43	84.3	1,140	658	<4.00	-1.11	6.8	
5/5/2022	0.352 J	217	0.567	0.737 J	1.93	41.8	233	49.1	3.67	82.4	1,210	659	<4.00	-7.39	6.6	
5/10/2022	0.589	219	0.643	0.100	<0.0293	44.6	301	61.6	4.74	90.5	1,080	652	<4.00	2.74	6.4	
5/19/2022	0.551	217	0.519	<0.0391	<0.0293	45.9	242	51.7	4.08	74.8	1,040	421	<4.00	5.76	6.7	
5/26/2022	0.606	212	0.714	0.0986 J	2.77	41.2	215	38.7	2.93	66.7	1,240	683	<4.00	-11.5	6.2	
6/1/2022	0.449 J	205	0.788	0.0622 J	<0.0293	37.2	219	42.0	3.22	67.7	1,100	402	<4.00	2.15	7.0	
6/9/2022	0.395 J	215	0.332 J	0.0721 J	<0.0293	44.2	295	53.3	4.27	80.9	1,170	712	<4.00	-1.83	6.3	
6/17/2022	0.282 J	204	0.643	0.151	<0.0293	43.9	190	35.3	2.54	59.9	1,160	619	<4.00	-16.7	6.4	
6/23/2022	0.321 J	206	0.377 J	0.250	<0.0293	38.4	306	47.2	3.80	73.0	1,150	454	<4.00	11.3	6.5	
6/29/2022	0.350 J	213	0.505	0.207	<0.0293	44.4	243	49.9	3.79	77.7	889	674	<4.00	-6.92	6.3	
7/7/2022	0.425 J	214	0.609	<0.0391	<0.0293	46.0	251	50.6	3.88	77.0	1,470	592	<4.00	-2.28	6.5	
7/13/2022	0.393 J	212	0.663	0.129	<0.0293	46.2	245	48.1	3.89	74.2	1,160	417	<4.00	5.53	6.3	
7/20/2022	0.468 J	207	0.383 J	0.0538 J	<0.0293	47.5	251	51.8	4.12	77.2	1,170	742	<4.00	-8.12	6.4	
7/27/2022	0.437 J	209	0.349 J	0.201	<0.0293	46.2	215	42.6	3.22	68.3	1,350	601	<4.00	-9.64	6.7	
8/4/2022	0.483 J	211	0.453 J	0.236	<0.0293	45.4	199	39.8	3.04	65.6	1,300	600	<4.00	-13.2	6.4	
8/10/2022	0.464 J	215	0.475 J	0.103	<0.0293	44.3	278	53.6	4.27	78.9	1,160	567	<4.00	3.02	6.5	
8/18/2022	0.473 J	213	0.552	0.157	<0.0293	45.4	261	52.0	4.22	80.6	1,370	563	<4.00	0.748	6.5	
8/24/2022	0.500	222	0.674	<0.100	<0.100	48.7	229	46.5	3.28	72.0	1,280	728	<4.00	-12.7	6.6	
8/31/2022	0.434 J	217	0.468 J	<0.0391	<0.0293	46.8	253	50.7	4.20	79.3	1,270	651	<4.00	-4.91	6.9	
9/15/2022	1.55	218	0.688	0.116	<0.0293	47.4	241	52.6	4.39	81.7	1,170	618	<4.00	-4.19	6.4	
9/22/2022	0.468 J	217	0.316 J	0.546	<0.0293	52.8	179	39.9	3.11	66.4	1,250	613	<4.00	-17.7	6.4	
9/28/2022	2.32	214	0.688	0.234	<0.0293	47.2	242	48.3	4.11	73.6	1,160	592	<4.00	-4.04	6.4	
10/4/2022	0.515	200	0.740	0.396	<0.0293	45.0										



TABLE 2 GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001 / 03B1417002																			
Sample Designation	Date	(mg/l)													%	SU			
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Calcium-Anion Balance	pH			
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9			
MW-1	5/26/2020	NA	363	0.913	0.998	1.03	283	NA											7.21
	6/30/2020	0.591	342	<0.500	0.145	<0.100	88.8	401	84.7	6.41	191	1,890	1,290	<4.00	NA	6.75			
	8/20/2020	0.634	339	<0.500	<0.100	<0.100	68.3	401	90.3	5.38	147	1,760	1,210	<4.00	NA	6.30			
	10/23/2020	NA	353	NA															
	11/24/2020	0.629	345	0.309 J	0.161	2.00	73.2	412	82.8	5.61	124	1,630	1,200	<4.00	0.400	6.45			
	12/18/2020	NA	375	NA				414	79.7	5.41	117	1,380	1,160	<4.00	1.30	6.58			
	12/23/2020	0.627	339	0.316 J	0.117	<0.0293	73.2	408	82.5	6.58	119	1,600	1,130	<4.00	2.10	6.56			
	12/30/2020	NA	347	NA															
	1/6/2021	NA	325	NA															
	1/12/2021	NA	359	NA								1,160		<4.00	NA	6.42			
	1/20/2021	NA	353	NA								1,160		<4.00	NA	6.34			
	1/27/2021	NA	334	NA								1,010		<4.00	NA	6.44			
	2/3/2021	NA	368	NA								1,130		<4.00	NA	6.38			
	2/10/2021	NA	339	NA								1,160		<4.00	NA	6.45			
	2/24/2021	NA	343	NA								1,070		<4.00	NA	6.45			
	3/4/2021	NA	339	NA								1,070		<4.00	NA	6.38			
	3/10/2021	NA	324	NA								1,020		<4.00	NA	6.34			
	3/17/2021	NA	330	NA								1,020		<4.00	NA	6.16			
	3/25/2021	NA	312	0.367 J	0.129	<0.100	77.5	NA				980		<4.00	NA	6.9			
	3/31/2021	NA	309	0.387 J	0.175	<0.0293	81.3	NA				977		<4.00	NA	6.7			
	4/8/2021	NA	290	0.515	0.0994 J	<0.0293	58.1	NA				933		<4.00	NA	6.5			
	4/15/2021	NA	272	0.583	0.107	<0.0293	54.0	NA				833		<4.00	NA	6.6			
	4/21/2021	NA	299	0.369 J	0.135	<0.0293	52.7	NA				927		<4.00	NA	6.5			
	4/28/2021	NA	315	0.315 J	0.119	<0.0293	57.8	NA				994		<4.00	NA	6.5			
	5/5/2021	NA	317	0.358 J	0.135	<0.0293	68.5	NA				1,020		<4.00	NA	6.5			
	5/13/2021	NA	270	0.492 J	0.125	0.729 J	55.6	NA				819		<4.00	NA	6.8			
	5/19/2021	NA	324	0.335 J	<0.0391	2.58	65.0	NA				1,070		<4.00	NA	6.5			
	5/27/2021	NA	325	0.380 J	0.128	0.148	70.3	NA				971		<4.00	NA	6.3			
	6/2/2021	NA	315	0.305 J	0.146	<0.0293	72.8	NA				979		<4.00	NA	6.5			
	6/10/2021	NA	295	0.561	0.130	1.44	64.7	NA				768		<4.00	NA	6.6			
	6/16/2021	NA	320	0.478 J	0.127	0.243	59.1	NA				811		<4.00	NA	6.7			
	6/22/2021	NA	311	0.478 J	0.119	1.65	56.9	NA				790		<4.00	NA	6.8			
	6/30/2021	NA	308	0.561	0.145	0.168	64.2	NA				813		<4.00	NA	6.7			
	7/1/2021		Levey Well Now Running Full Time																
	7/7/2021	NA	325	0.547	0.127	<0.0293	75.9	NA				761		<4.00	NA	6.8			
	7/14/2021	NA	360	0.418 J	0.134	0.0880 J	112	NA				931		<4.00	NA	6.8			
	7/20/2021	NA	324	0.138 J	0.0457 J	<0.0293	81.5	NA				750		<4.00	NA	6.7			
	7/27/2021	NA	352	0.340 J	0.148	1.22	82.8	NA				786		<4.00	NA	6.7			
	8/5/2021	NA	336	0.426 J	0.117	<0.0293	79.0	NA				695		<4.00	NA	6.9			
	8/11/2021	NA	326	0.342 J	0.153	1.48	85.5	NA				735		<4.00	NA	6.6			
	8/19/2021	NA	334	0.227 J	0.149	1.36	81.9	NA				810		<4.00	NA	6.8			
	8/25/2021	NA	328	0.395 J	0.132	0.947 J	76.5	NA				809		<4.00	NA	6.8			
	9/2/2021	NA	325	0.311 J	0.105	<0.0293	74.7	NA				755		<4.00	NA	6.8			
	9/8/2021	NA	272	0.442 J	0.103	0.782 J	64.5	NA				584		<4.00	NA	6.9			
	9/14/2021	NA	332	0.276 J	0.103	0.776 J	98.4	NA				660		<4.00	NA	7.0			
	9/21/2021	NA	203	0.896	0.186	<0.0293	32.4	NA				419		<4.00	NA	6.9			
	9/29/2021	NA	232	0.659	0.168	0.0819 J	40.1	NA				505		<4.00	NA	6.9			
	10/7/2021	NA	253	0.626	0.186	<0.0293	58.2	NA				567		<4.00	NA	6.9			
	10/13/2021	NA	268	0.659	0.178	<0.0293	62.9	NA				564		<4.00	NA	8.1			
	10/21/2021	NA	293	0.409 J	0.144	<0.0293	81.1	NA				591		<4.00	NA	7.1			
	11/5/2021	NA	282	0.631	0.191	<0.0293	77.1	NA				571		<4.00	NA	7.0			
	11/11/2021	NA	311	0.309 J	0.258	<0.0293	89.9	NA				536		<4.00	NA	7.1			
	11/18/2021	NA	172	0.741	0.151	<0.0293	23.1	NA				314		<4.00	NA	7.4			
	11/24/2021	NA	267	0.429 J	0.220	0.549	81.4	NA				502		<4.00	NA	6.8			
	12/1/2021	NA	222	0.596	0.141	<0.0293	61.0	NA				390		<4.00	NA	7.3			
	12/8/2021	NA	226	0.358 J	0.162	<0.0293	66.0	NA				484		<4.00	NA	6.9			
	12/16/2021	NA	174	0.504	0.143	<0.0293	49.9	NA				398		<4.00	NA	6.9			
	12/22/2021	NA	163	0.517	0.240	<0.0293	40.2	NA				312		<4.00	NA	7.1			
	12/29/2021	NA	142	0.591	0.205	0.295	42.2	NA				302		<4.00	NA	7.3			
	1/6/2022	NA	138	0.471 J	0.180	<0.0293	43.2	NA				335		<4.00	NA	7.0			
	1/12/2022	NA	149	0.491 J	0.154	0.0428 J	42.1	NA				326		<4.00	NA	6.7			
	1/19/2022	NA	141	0.532	0.145	0.227	45.1	NA				324		<4.00	NA	7.0			
	1/26/2022	NA	142	0.548	0.177	0.150	44.7	NA				282		<4.00	NA	7.1			
	2/2/2022		Unable to Sample due to Inclement Weather. Booster Pump for Levey Well Damaged by Freeze.																
	2/8/2022	NA	189	0.631	0.0688 J	0.358	49.6	NA				380		<4.00	NA	6.9			
	2/16/2022	NA	151	0.712	0.0561 J	0.344	41.5	NA				384		<4.00	NA	7.1			
	2/25/2022	NA	171	0.739	0.125	0.156	50.3	NA				342		<4.00	NA	7.1			
3/3/2022	NA	158	0.531	0.198	0.181	45.9	NA				360		<4.00	NA	6.9				
3/9/2022	NA	148	0.454 J	0.170	<0.0293	45.4	NA				323		<4.00	NA	7.2				
3/14/2022		Booster Pump for Levey Well Repaired and Back on Running Full Time.																	
3/16/2022	NA	145	0.546	0.147	<0.0293	38.1	NA				339		<4.00	NA	7.0				



TABLE 2 GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001 / 03B1417002																	
Sample Designation	Date	(mg/l)													%	SU	
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Cation-Anion Balance	pH	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9	
MW-1	3/24/2022	NA	147	0.610	<0.0391	<0.0293	42.9	NA						297	<4.00	NA	7.2
	3/31/2022	NA	143	0.568	0.164	<0.0293	40.4	NA						275	<4.00	NA	7.1
	4/6/2022	NA	133	0.677	0.186	<0.0293	39.7	NA						262	<4.00	NA	7.1
	4/13/2022	NA	129	0.767	<0.0391	<0.0293	40.9	NA						259	<4.00	NA	7.6
	4/20/2022	NA	173	0.574	0.152	0.176	42.4	NA						362	<4.00	NA	7.0
	4/28/2022	NA	136	0.608	0.0700 J	0.0717 J	41.7	NA						300	<4.00	NA	7.5
	5/5/2022	NA	118	0.746	<0.0391	1.75	41.1	NA						253	<4.00	NA	7.2
	5/10/2022	NA	116	0.709	0.0815 J	<0.0293	43.9	NA						250	<4.00	NA	7.2
	5/19/2022	NA	106	0.643	0.0743 J	0.199	41.0	NA						262	<4.00	NA	7.1
	5/26/2022	NA	98.7	0.720	0.0777 J	0.809	44.7	NA						256	<4.00	NA	7.2
	6/1/2022	NA	100	0.690	0.0629 J	<0.0293	46.4	NA						240	<4.00	NA	7.4
	6/9/2022	NA	99.9	0.743	<0.0391	<0.0293	46.6	NA						246	<4.00	NA	7.1
	6/17/2022	NA	83.5	0.710	0.146	0.275	47.9	NA						253	<4.00	NA	7.3
	6/23/2022	NA	83.9	0.616	0.238	<0.0293	47.7	NA						258	<4.00	NA	7.2
	6/29/2022	NA	84.8	0.644	0.199	0.556	48.0	NA						264	<4.00	NA	7.2
	7/7/2022	NA	83.7	0.660	0.0413 J	0.0458 J	47.7	NA						238	<4.00	NA	7.4
	7/13/2022	NA	91.3	0.778	0.102	<0.0293	49.2	NA						253	<4.00	NA	7.2
	7/20/2022	NA	81.5	0.766	<0.0391	<0.0293	48.5	NA						249	<4.00	NA	7.2
	7/27/2022	NA	85.8	0.766	0.0482 J	<0.0293	47.2	NA						268	<4.00	NA	7.7
	8/4/2022	NA	77.5	0.633	0.126	0.118	43.1	NA						253	<4.00	NA	7.2
	8/10/2022	NA	68.3	0.737	<0.0391	0.212	40.9	NA						278	<4.00	NA	7.2
	8/18/2022	NA	77.7	0.752	0.0696 J	0.154	39.4	NA						262	<4.00	NA	7.0
	8/24/2022	NA	92.0	0.739	<0.100	<0.100	40.8	NA						273	<4.00	NA	7.2
	8/31/2022	NA	85.9	0.628	<0.0391	<0.0293	36.7	NA						277	<4.00	NA	7.4
	9/15/2022	NA	86.4	1.03	0.0909 J	0.206	33.4	NA						277	<4.00	NA	7.0
	9/22/2022	NA	95.8	0.585	0.518	<0.0293	38.4	NA						280	<4.00	NA	7.3
	9/28/2022	NA	91.2	0.702	<0.0391	<0.0293	32.8	NA						285	<4.00	NA	7.3
	10/4/2022	NA	75.6	0.803	0.376	0.201	33.7	NA						272	<4.00	NA	7.2
	10/14/2022	NA	81.0	0.807	0.360	0.195	33.1	NA						266	<4.00	NA	7.3
	10/19/2022	NA	136	<0.100	<0.0391	<0.0293	19.2	NA						283	<4.00	NA	7.4
	10/27/2022	NA	80.4	0.750	0.0601 J	0.423	29.8	NA						277	<4.00	NA	7.4



TABLE 2 GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001 / 03B1417002																			
Sample Designation	Date	(mg/l)													%	SU			
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Calcium-Anion Balance	pH			
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9			
MW-2	5/26/2020	NA	106	0.341 J	1.920	0.639	120	NA											6.32
	6/30/2020	0.535	115	<0.500	1.13	0.656	111	478	59.6	6.66	102	1,320	1,320	<4.00	NA	6.36			
	8/20/2020	0.603	150	<0.500	1.10	0.439	122	559	73.5	7.46	102	1,700	1,350	<4.00	NA	6.01			
	10/23/2020	NA	107	NA															
	11/24/2020	0.565	180	0.172 J	1.08	0.557	136	841	85.5	12.8	116	1,670	1,450	<4.00	15.4	6.30			
	12/18/2020	NA	153	NA				494	64.9	6.63	98.0	1,410	1,380	<4.00	3.20	6.29			
	12/23/2020	0.621	165	0.179 J	1.11	0.639	126	472	65.7	5.96	101	1,810	1,430	<4.00	0.300	6.27			
	12/30/2020	NA	153	NA															
	1/6/2021	NA	124	NA															
	1/12/2021	NA	141					NA					1,350	<4.00	NA	6.20			
	1/20/2021	NA	133					NA					1,360	<4.00	NA	6.12			
	1/27/2021	NA	140					NA					1,360	<4.00	NA	6.24			
	2/3/2021	NA	178					NA					1,390	<4.00	NA	6.17			
	2/10/2021	NA	133					NA					1,380	<4.00	NA	6.19			
	2/24/2021	NA	146					NA					1,370	<4.00	NA	6.17			
	3/4/2021	NA	166					NA					1,380	<4.00	NA	6.07			
	3/10/2021	NA	175					NA					1,390	<4.00	NA	6.14			
	3/17/2021	NA	163					NA					1,400	<4.00	NA	5.87			
	3/25/2021	NA	161	0.183 J	0.835	0.425	119	NA					1,420	<4.00	NA	6.5			
	3/31/2021	NA	102	0.299 J	0.714	1.13	99.9	NA					1,330	<4.00	NA	6.4			
	4/8/2021	NA	157	0.223 J	0.784	0.549	122	NA					1,430	<4.00	NA	6.2			
	4/15/2021	NA	136	0.255 J	0.711	0.683	115	NA					1,380	<4.00	NA	6.1			
	4/21/2021	NA	114	0.157 J	0.650	0.856	101	NA					1,340	<4.00	NA	6.1			
	4/28/2021	NA	155	0.178 J	0.692	0.511	118	NA					1,380	<4.00	NA	6.2			
	5/5/2021	NA	122	0.198 J	0.704	0.609	105	NA					1,350	<4.00	NA	6.3			
	5/13/2021	NA	104	0.199 J	0.686	1.02	98.3	NA					1,320	<4.00	NA	6.3			
	5/19/2021	NA	142	0.171 J	0.633	0.435	120	NA					1,370	<4.00	NA	6.2			
	5/27/2021	NA	147	0.206 J	0.689	0.889	120	NA					1,260	<4.00	NA	6.5			
	6/2/2021	NA	119	0.168 J	0.647	0.549	103	NA					1,250	<4.00	NA	6.2			
	6/10/2021	NA	151	0.252 J	0.714	2.77	123	NA					1,260	<4.00	NA	6.1			
	6/16/2021	NA	118	0.205 J	0.613	1.36	104	NA					1,208	<4.00	NA	6.5			
	6/22/2021	NA	122	0.171 J	0.593	0.969	105	NA					1,260	<4.00	NA	6.5			
	6/30/2021	NA	111	0.417 J	0.633	1.37	102	NA					1,230	<4.00	NA	6.4			
	7/1/2021		Levey Well Now Running Full Time																
	7/7/2021	NA	110	0.257 J	0.543	0.713	98.2	NA					1,120	<4.00	NA	6.4			
	7/14/2021	NA	187	0.233 J	0.752	0.797	124	NA					1,350	<4.00	NA	6.4			
	7/20/2021	NA	123	0.132 J	0.460	0.659	107	NA					1,280	<4.00	NA	6.3			
	7/27/2021	NA	113	0.134 J	0.607	0.516 J	100	NA					1,250	<4.00	NA	6.4			
	8/5/2021	NA	120	0.189 J	0.660	0.552	103	NA					1,200	<4.00	NA	6.5			
	8/11/2021	NA	115	0.181 J	0.624	3.02	101	NA					1,300	<4.00	NA	6.3			
	8/19/2021	NA	122	0.104 J	0.630	1.73	104	NA					1,290	<4.00	NA	6.4			
	8/25/2021	NA	122	0.191 J	0.639	0.603	103	NA					1,270	<4.00	NA	6.5			
	9/2/2021	NA	110	<0.100	0.536	0.595	98.1	NA					1,320	<4.00	NA	6.4			
	9/8/2021	NA	105	<0.100	0.540	0.590	97.3	NA					1,280	<4.00	NA	6.4			
	9/14/2021	NA	124	<0.100	0.542	0.386	107	NA					1,270	<4.00	NA	6.4			
	9/21/2021	NA	90.5	0.426 J	0.638	1.04	89.1	NA					1,250	<4.00	NA	6.3			
	9/29/2021	NA	133	0.245 J	0.631	0.982	117	NA					1,300	<4.00	NA	6.4			
	10/7/2021	NA	108	0.201 J	0.581	0.564	96.6	NA					1,280	<4.00	NA	6.4			
	10/13/2021	NA	178	0.140 J	0.734	0.507	131	NA					1,320	<4.00	NA	6.5			
	10/21/2021	NA	102	0.133 J	0.635	0.787	93.3	NA					1,270	<4.00	NA	6.5			
	11/5/2021	NA	141	0.363 J	<0.0391	0.454	108	NA					1,250	<4.00	NA	6.6			
	11/11/2021	NA	115	<0.100	0.677	0.374	97.6	NA					1,240	<4.00	NA	6.5			
	11/18/2021	NA	103	<0.100	0.600	1.28	98.1	NA					1,140	<4.00	NA	6.6			
	11/24/2021	NA	163	<0.500	0.680	0.539	127	NA					1,500	<4.00	NA	6.3			
	12/1/2021	NA	120	0.148 J	0.604	0.511	103	NA					1,240	<4.00	NA	6.9			
	12/8/2021	NA	188	<0.100	0.759	0.684	123	NA					1,250	<4.00	NA	6.3			
	12/16/2021	NA	134	<0.100	0.529	<0.0293	113	NA					1,180	<4.00	NA	6.3			
	12/22/2021	NA	163	<0.100	0.670	0.462	122	NA					1,280	<4.00	NA	6.4			
	12/29/2021	NA	210	<0.100	1.02	0.415	115	NA					1,280	<4.00	NA	6.3			
	1/6/2022	NA	106	<0.100	0.559	0.746	97.5	NA					1,300	<4.00	NA	6.4			
1/12/2022	NA	73.9	0.288 J	0.506	1.47	92.2	NA					1,150	<4.00	NA	6.2				
1/19/2022	NA	120	<0.100	0.591	0.757	104	NA					1,290	<4.00	NA	6.1				
1/26/2022	NA	120	<0.100	0.592	0.608	100	NA					1,270	<4.00	NA	6.1				
2/2/2022		Unable to Sample due to Inclement Weather. Booster Pump for Levey Well Damaged by Freeze.																	
2/8/2022	NA	148	0.156 J	0.683	1.03	125	NA					1,290	<4.00	NA	6.1				
2/16/2022	NA	186	0.409 J	0.809	0.338	113	NA					1,320	<4.00	NA	6.2				
2/25/2022	NA	133	0.704	0.536	0.647	154	NA					1,280	<4.00	NA	6.3				
3/3/2022	NA	126	<0.100	0.776	0.992	112	NA					1,360	<4.00	NA	6.1				
3/9/2022	NA	167	<0.100	0.789	2.12	133	NA					1,330	<4.00	NA	6.2				
3/14/2022		Booster Pump for Levey Well Repaired and Back on Running Full Time.																	
3/16/2022	NA	165	<0.100	0.890	1.47	135	NA					1,350	<4.00	NA	6.2				
3/24/2022	NA	140	<0.100	<0.0391	0.389	120	NA					1,320	<4.00	NA	6.3				



TABLE 2 GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001 / 03B1417002																
Sample Designation	Date	(mg/l)													%	SU
		Bromide	Chloride	Fluoride	Nitrate as N	Nitric as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Cation-Anion Balance	pH
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9
MW-2	3/31/2022	NA	150	<0.100	<0.0391	1.65	106			NA			1,340	<4.00	NA	6.3
	4/6/2022	NA	130	0.175 J	0.619	1.60	111			NA			1,360	<4.00	NA	6.2
	4/13/2022	NA	135	0.271 J	0.589	1.67	108			NA			1,380	<4.00	NA	6.5
	4/20/2022	NA	198	0.174 J	0.966	0.722	121			NA			1,330	<4.00	NA	6.4
	4/28/2022	NA	156	0.172 J	0.711	0.434	118			NA			1,380	<4.00	NA	6.4
	5/5/2022	NA	116	0.229 J	0.586	11.5	112			NA			1,330	<4.00	NA	6.3
	5/10/2022	NA	134	0.230 J	0.548	1.83	120			NA			1,320	<4.00	NA	6.3
	5/19/2022	NA	133	0.116 J	<0.0391	0.373	118			NA			1,380	<4.00	NA	6.2
	5/26/2022	NA	107	0.196 J	0.392	1.14	104			NA			1,320	<4.00	NA	6.0
	6/1/2022	NA	130	0.107 J	0.481	1.47	116			NA			1,340	<4.00	NA	6.3
	6/9/2022	NA	103	<0.100	0.330	0.236	103			NA			1,320	<4.00	NA	6.2
	6/17/2022	NA	99.0	0.213 J	0.395	0.702	102			NA			1,290	<4.00	NA	6.4
	6/23/2022	NA	109	<0.100	0.494	5.21	107			NA			1,270	<4.00	NA	6.3
	6/29/2022	NA	82.6	0.111 J	0.351	0.827	89.7			NA			1,330	<4.00	NA	6.2
	7/7/2022	NA	107	0.141 J	0.399	0.440	98.3			NA			1,300	<4.00	NA	6.4
	7/13/2022	NA	95.3	0.262 J	0.306	1.23	100			NA			1,280	<4.00	NA	6.2
	7/20/2022	NA	134	<0.100	0.485	1.46	122			NA			1,360	<4.00	NA	6.3
	7/27/2022	NA	101	<0.100	0.403	3.86	105			NA			1,340	<4.00	NA	6.4
	8/4/2022	NA	107	0.112 J	0.451	0.477	99.9			NA			1,250	<4.00	NA	6.2
	8/10/2022	NA	89.4	0.189 J	0.189	0.210	97.2			NA			1,260	<4.00	NA	6.3
	8/18/2022	NA	99.1	0.122 J	0.333	0.303	100			NA			1,280	<4.00	NA	6.3
	8/24/2022	NA	110	0.172 J	0.282	0.427	103			NA			1,290	<4.00	NA	6.3
	8/31/2022	NA	94.8	<0.100	0.175	0.238	94.4			NA			1,280	<4.00	NA	6.3
	9/15/2022	NA	94.4	0.538	0.232	2.31	98.7			NA			1,320	<4.00	NA	6.3
	9/22/2022	NA	94.4	0.260 J	0.650	0.481	105			NA			1,320	<4.00	NA	6.3
	9/28/2022	NA	91.2	0.498 J	0.261	<0.0293	92.5			NA			1,280	<4.00	NA	6.3
	10/4/2022	NA	88.9	0.143 J	0.497	0.189	97.0			NA			1,320	<4.00	NA	6.2
	10/14/2022	NA	82.6	0.101 J	<0.0391	0.0760 J	84.6			NA			1,320	<4.00	NA	6.2
	10/19/2022	NA	51.2	<0.100	0.101	<0.0293	48.5			NA			1,290	<4.00	NA	6.5
	10/27/2022	NA	124	0.165 J	0.319	0.871	104			NA			1,340	<4.00	NA	6.3

NOTES:
SU - standard units
mg/l - milligrams per liter
NE - not established
NA - not analyzed
J - The target analyte was positively identified below the quantitation limit and above the detection limit.
Concentrations highlighted in yellow exceed the NMAC Human Health Standards



TABLE 3 GROUNDWATER SAMPLING (Additional Parameters) ANALYTICAL DATA SUMMARY South Hobbs G/SA Unit Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417002									
Sample Designation	Date	(mg/l)						°C	
		Sulfide	Carbon Dioxide (Free)	TPH GRO	TPH DRO	TPH MRO	Total TPH	Temperature	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	NE	NE	NE	NE	NE	NE	
MW-1	5/26/2020	<0.495	163	<0.943	1.48	<0.910	1.48	22.9	
	6/30/2020	<5.00	648	<2.34	<2.34	<2.34	<2.34	21.9	
	8/20/2020	<5.00	596	2.35	3.18	<2.26	5.53	23.7	
	11/24/2020	<0.495	756	<0.907	<0.838	<0.838	<0.8380	19.1	
	12/18/2020	<0.495	432	<0.909	<0.840	<0.840	<0.840	15.8	
	12/23/2020	<0.495	553	<0.895	1.81 J	<0.827	1.81 J	15.5	
	12/30/2020	<0.495	1,170	<0.917	<0.847	<0.847	<0.847	13.1	
	1/6/2021	<0.495	585	<0.897	<0.829	<0.829	<0.829	12.7	
	1/12/2021	<0.495	731	<0.891	<0.823	<0.823	<0.823	14.6	
	1/20/2021	0.600 J	667	<0.889	<0.821	<0.821	<0.821	17.6	
	1/27/2021	0.800 J	668	<0.909	<0.840	<0.840	<0.840	18.0	
	2/3/2021	<0.495	699	<0.907	<0.838	<0.838	<0.838	20.6	
	2/10/2021	1.20 J	423	1.66 J	<0.828	<0.828	1.66 J	14.1	
	2/24/2021	0.600 J	448	<0.884	<0.817	<0.817	<0.817	18.0	
	3/4/2021	<0.495	515	3.04	1.03 J	<0.846	4.07	18.8	
	3/10/2021	1.20 J	499	<0.878	<0.811	<0.811	<0.811	18.6	
	3/17/2021	<0.495	378	<0.886	<0.819	<0.819	<0.819	19.1	
	3/25/2021	<0.495	333	17.2	1.00 J	<0.867	18.2	20.2	
	3/31/2021	<0.495	526	<0.893	<0.825	<0.825	<0.825	18.4	
	4/8/2021	<0.495	364	2.57 J	1.55 J	<0.867	4.12 J	18.9	
	4/15/2021	<0.495	418	<0.887	<0.887	1.72 J	1.72 J	20.5	
	4/21/2021	<0.495	415	<0.898	2.05 J	<0.867	2.05 J	18.8	
	4/28/2021	<0.495	689	<0.890	1.19 J	<0.859	1.19 J	18.9	
	5/5/2021	<0.495	647	<0.890	<0.890	<0.859	<0.890	18.8	
	5/13/2021	<0.495	259	<0.893	<0.893	<0.862	<0.893	19.0	
	5/19/2021	<0.495	679	<0.893	<0.893	<0.862	<0.893	21.5	
	5/27/2021	<0.495	973	<0.923	<0.923	<0.891	<0.923	20.6	
	6/2/2021	<0.495	619	<0.918	<0.918	<0.886	<0.918	18.1	
	6/10/2021	<0.495	385	<0.915	<0.915	<0.883	<0.915	22.0	
	6/16/2021	<0.495	323	<0.926	<0.926	<0.894	<0.926	18.2	
	6/22/2021	<0.495	250	<0.938	<0.938	<0.905	<0.938	22.1	
	6/30/2021	<0.495	324	<0.923	<0.923	<0.891	<0.923	21.0	
	7/1/2021	Levey Well Now Running Full Time							
	7/7/2021	<0.495	241	<0.901	<0.901	<0.869	<0.901	18.4	
	7/14/2021	<0.495	295	<0.991	<0.957	<0.991	<0.991	19.0	
	7/20/2021	<0.495	321	<0.938	<0.938	<0.905	<0.938	19.8	
	7/27/2021	<0.495	321	<0.906	<0.906	<0.875	<0.906	22.0	
	8/5/2021	<0.495	196	<0.950	<0.950	<0.917	<0.950	21.9	
	8/11/2021	<0.495	369	<0.932	<0.932	<0.900	<0.932	19.9	
	8/19/2021	<0.495	457	<0.950	<0.950	<0.917	<0.950	20.8	
	8/25/2021	<0.495	477	<0.918	<0.918	<0.886	<0.918	20.0	
	9/2/2021	<0.495	416	<0.935	<0.935	<0.902	<0.935	20.6	
	9/8/2021	<0.495	280	<0.953	<0.953	<0.920	<0.953	21.4	
	9/14/2021	<0.495	289	<0.932	0.978 J	<0.900	0.978 J	19.3	
	9/21/2021	1.00 J	105	<0.918	<0.918	<0.886	<0.918	18.0	
	9/29/2021	<0.495	127	<0.998	<0.998	<0.963	<0.998	18.7	
	10/7/2021	<0.495	143	<0.923	<0.923	<0.891	<0.923	18.0	
	10/13/2021	<0.495	8.85	<0.950	<0.950	<0.917	<0.950	20.7	
	10/21/2021	<0.495	434	<0.918	<0.918	<0.886	<0.918	19.9	
	11/5/2021	<0.495	114	<1.03	<1.03	<0.993	<1.03	22.9	
	11/11/2021	<0.495	563	<0.923	<0.923	<0.891	<0.923	19.3	
	11/18/2021	<0.495	24.9	1.05 J	<0.969	<0.935	1.05 J	19.0	
	11/24/2021	<5.00	159	<4.70	<4.70	<4.70	<4.70	19.7	
	12/1/2021	<0.495	39.0	<0.935	<0.935	<0.902	<0.935	19.4	
	12/8/2021	<0.495	122	<0.929	<0.929	<0.897	<0.929	18.1	
	12/16/2021	<0.495	69.3	<0.962	<0.962	<0.929	<0.962	18.0	
	12/22/2021	<0.495	49.5	1.34 J	<0.941	<0.908	1.34 J	21.5	
	12/29/2021	<0.495	50.2	<0.935	<0.935	<0.902	<0.935	18.1	
	1/6/2022	<0.495	67.0	<0.932	<0.932	<0.900	<0.932	18.0	
	1/12/2022	<0.495	130	0.960 J	1.06 J	<0.900	2.02 J	21.7	
	1/19/2022	<0.495	56.4	<0.912	<0.912	<0.880	<0.912	18.0	
	1/26/2022	<0.495	44.7	<0.898	<0.898	<0.867	<0.898	18.8	
	2/2/2022	Unable to Sample due to Incliment Weather. Booster Pump for Levey Well Damaged by Freeze.							
	2/8/2022	<0.495	95.7	<0.895	<0.895	<0.864	<0.895	20.8	
	2/16/2022	<0.495	61.0	<0.877	<0.877	<0.846	<0.877	18.7	
	2/25/2022	<0.495	54.2	<0.923	<0.923	<0.891	<0.923	20.0	
	3/3/2022	<0.495	90.5	<0.935	<0.935	<0.902	<0.935	18.2	
	3/9/2022	<0.495	40.7	<0.874	<0.874	<0.874	<0.874	18.1	
	3/14/2022	Booster Pump for Levey Well Repaired and Back on Running Full Time.							
	3/16/2022	<0.495	67.6	<0.959	<0.959	<0.959	<0.959	18.1	
3/24/2022	<0.495	37.5	<0.901	<0.901	<0.869	<0.901	18.9		
3/31/2022	<0.495	43.7	<0.926	<0.926	<0.894	<0.926	19.0		
4/6/2022	<0.495	41.6	<0.926	<0.926	<0.894	<0.926	18.1		
4/13/2022	<0.495	13.0	<0.918	<0.918	<0.886	<0.918	19.0		
4/20/2022	<0.495	72.4	<0.904	<0.904	<0.872	<0.904	18.3		
4/28/2022	<0.495	18.9	<0.890	<0.890	<0.859	<0.890	19.9		
5/5/2022	<0.495	31.8	<0.912	<0.912	<0.880	<0.912	19.5		
5/10/2022	1.20 J	31.5	<0.985	<0.985	<0.950	<0.985	16.7		
5/19/2022	0.600 J	41.5	<0.926	<0.926	<0.894	<0.926	20.3		
5/26/2022	1.00 J	32.2	<0.920	<0.920	<0.888	<0.920	18.0		
6/1/2022	0.800 J	19.0	<0.926	<0.926	<0.894	<0.926	20.5		
6/9/2022	0.600 J	24.6	<0.962	<0.962	<0.929	<0.962	20.3		
6/17/2022	<0.495	21.1	<0.918	<0.918	<0.886	<0.918	18.3		
6/23/2022	0.800 J	32.5	<0.932	<0.932	<0.900	<0.932	18.0		
6/29/2022	1.00 J	33.2	0.954 J	<0.923	<0.891	0.954 J	15.8		
7/7/2022	0.600 J	22.2	<0.947	<0.947	<0.914	<0.947	23.1		
7/13/2022	<0.495	31.9	<0.950	<0.950	<0.917	<0.950	20.6		
7/20/2022	<0.495	31.4	<0.959	<0.959	<0.926	<0.959	20.0		
7/27/2022	<0.495	10.6	<0.904	<0.904	<0.872	<0.904	17.6		
8/4/2022	0.800 J	31.9	<0.906	<0.906	<0.875	<0.906	19.2		
8/10/2022	1.00 J	35.0	<0.929	<0.929	<0.897	<0.929	19.8		
8/18/2022	<0.495	52.4	<1.04	<1.04	<1.00	<1.04	20.7		
8/24/2022	1.40 J	34.4	<4.78	<4.78	<4.78	<4.78	18.2		
8/31/2022	1.20 J	22.0	<0.932	<0.932	<0.900	<0.932	19.9		
9/15/2022	0.800 J	55.4	<0.988	<0.988	<0.954	<0.988	18.6		
9/22/2022	<0.495	28.0	<0.944	<0.944	<0.911	<0.944	21.0		
9/28/2022	1.20 J	28.5	<0.956	<0.956	<0.923	<0.956	17.9		
10/4/2022	0.800 J	34.2	<0.895	<0.895	<0.864	<0.895	17.8		
10/14/2022	1.20 J	26.6	<0.935	<0.935	<0.902	<0.935	18.7		
10/19/2022	<0.495	22.4	<0.981	<0.981	<0.947	<0.981	18.4		
10/27/2022	<0.495	22.0	<1.00	<1.00	<0.968	<1.00	25.0		



TABLE 3 GROUNDWATER SAMPLING (Additional Parameters) ANALYTICAL DATA SUMMARY South Hobbs G/SA Unit Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417002									
Sample Designation	Date	(mg/l)						°C	
		Sulfide	Carbon Dioxide (Free)	TPH GRO	TPH DRO	TPH MRO	Total TPH	Temperature	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	NE	NE	NE	NE	NE	NE	
MW-2	5/26/2020	<0.495	923	2.10	1.07 J	<0.900	6.16	23.1	
	6/30/2020	<5.00	1,290	<2.32	<2.32	<2.32	<2.32	22.1	
	8/20/2020	<5.00	1,150	2.75	3.29	<2.26	6.02	23.0	
	11/24/2020	<0.495	1,300	1.73 J	2.17 J	<0.835	3.900	19.1	
	12/18/2020	0.600 J	958	1.34 J	0.915 J	<0.824	2.26 J	15.1	
	12/23/2020	<0.495	1,090	1.61 J	1.12 J	<0.837	2.73	15.6	
	12/30/2020	<0.495	1,090	<0.893	<0.825	<0.825	<0.825	12.1	
	1/6/2021	<0.495	1,240	1.99 J	<0.824	<0.824	1.99 J	13.1	
	1/12/2021	11.2	1,450	1.64 J	<0.833	<0.833	1.64 J	13.9	
	1/20/2021	9.60	1,390	<0.907	<0.838	<0.838	<0.838	18.2	
	1/27/2021	15.0	1,600	1.31 J	<0.834	<0.834	1.31 J	13.4	
	2/3/2021	<0.495	1,030	0.955 J	1.15 J	<0.813	2.11 J	20.9	
	2/10/2021	<0.495	915	2.08	<0.746	<0.746	2.08	11.5	
	2/24/2021	<0.495	793	1.01 J	<0.832	<0.832	1.01 J	19.4	
	3/4/2021	<0.495	1,030	1.74 J	<0.819	<0.819	1.74 J	18.2	
	3/10/2021	<0.495	1,010	<0.893	<0.825	<0.825	<0.825	18.5	
	3/17/2021	<0.495	970	2.33	<0.835	<0.835	2.33	19.5	
	3/25/2021	<0.495	653	1.50 J	1.16 J	<0.857	2.66 J	20.2	
	3/31/2021	<0.495	1,110	<0.941	<0.941	<0.908	<0.941	18.3	
	4/8/2021	<0.495	1,010	2.30 J	1.01 J	<0.875	3.31 J	18.9	
	4/15/2021	<0.495	2,200	2.49 J	0.999 J	1.70 J	5.19	20.1	
	4/21/2021	<0.495	1,230	1.01 J	0.913 J	<0.856	1.92 J	18.9	
	4/28/2021	<0.495	1,100	2.54 J	1.19 J	<0.872	3.73 J	19.0	
	5/5/2021	<0.495	1,350	2.09 J	<0.890	<0.859	2.09 J	18.8	
	5/13/2021	<0.495	1,320	1.18 J	<0.906	<0.875	1.18 J	19.6	
	5/19/2021	<0.495	1,730	1.46 J	<0.901	<0.869	1.46 J	19.8	
	5/27/2021	<0.495	798	<0.920	<0.920	<0.888	<0.920	20.8	
	6/2/2021	<0.495	1,580	2.01 J	<0.895	<0.864	2.01 J	18.1	
	6/10/2021	<0.495	2,010	1.46 J	<0.882	<0.851	1.46 J	22.0	
	6/16/2021	<0.495	810	0.963 J	<0.826	<0.797	0.963 J	18.0	
	6/22/2021	<0.495	795	1.18 J	<0.947	<0.914	1.18 J	22.2	
	6/30/2021	<0.495	975	1.21 J	<0.893	<0.862	1.21 J	20.3	
	7/1/2021	Levey Well Now Running Full Time							
	7/7/2021	<0.495	889	1.62 J	<0.906	<0.875	1.62 J	18.3	
	7/14/2021	<0.495	1,080	<0.965	<0.965	<0.932	<0.965	19.3	
	7/20/2021	<0.495	1,170	1.16 J	<0.898	<0.867	1.16 J	19.8	
	7/27/2021	<0.495	950	1.03 J	<0.906	<0.875	1.03 J	22.3	
	8/5/2021	<0.495	778	<0.909	<0.909	<0.877	<0.909	22.1	
	8/11/2021	<0.495	1,040	1.46 J	<0.887	<0.856	1.46 J	19.7	
	8/19/2021	<0.495	2,010	1.93 J	<0.959	<0.926	1.93 J	20.7	
	8/25/2021	<0.495	1,400	1.01 J	<0.932	<0.900	1.01 J	19.2	
	9/2/2021	<0.495	1,830	3.03 J	2.11 J	<0.920	5.14	21.4	
	9/8/2021	<0.495	1,570	1.70 J	<0.932	<0.900	1.70 J	20.5	
	9/14/2021	<0.495	1,240	1.93 J	1.01 J	<0.917	2.94 J	19.4	
	9/21/2021	<0.495	1,260	1.33 J	<0.941	<0.908	1.33 J	18.0	
	9/29/2021	<0.495	1,040	1.60 J	<1.19	<1.15	1.60 J	18.5	
	10/7/2021	<0.495	1,020	1.45 J	<0.988	<0.954	1.45 J	18.0	
	10/13/2021	<0.495	834	1.56 J	<0.935	<0.902	1.56 J	20.6	
	10/21/2021	<0.495	2,420	1.64 J	<0.918	<0.886	1.64 J	19.8	
	11/5/2021	<0.495	628	1.39 J	<0.965	<0.932	1.39 J	22.8	
	11/11/2021	<0.495	4,500	2.27 J	<0.985	<0.950	2.27 J	18.5	
	11/18/2021	<0.495	574	2.56 J	<0.923	<0.891	2.56 J	19.5	
	11/24/2021	<5.00	1,500	2.34 J	<4.59	<4.59	2.34 J	19.1	
	12/1/2021	<0.495	313	1.69 J	<0.912	<0.880	1.69 J	19.2	
	12/8/2021	<0.495	1,260	1.86 J	<0.932	<0.900	1.86 J	18.9	
	12/16/2021	<0.495	957	1.15 J	<0.947	<0.914	1.15 J	18.0	
	12/22/2021	<0.495	1,020	1.95 J	<0.944	<0.911	1.95 J	21.6	
	12/29/2021	<0.495	1,250	1.15 J	<0.935	<0.902	1.15 J	18.0	
	1/6/2022	<0.495	1,030	1.31 J	<0.915	<0.883	1.31 J	18.2	
	1/12/2022	<0.495	1,450	3.63 J	1.34 J	<1.00	4.97 J	22.0	
	1/19/2022	<0.495	1,420	2.83 J	<0.915	<0.883	2.83 J	18.2	
	1/26/2022	<0.495	2,020	<0.923	<0.923	<0.891	<0.923	18.8	
	2/2/2022	Unable to Sample due to Incliment Weather. Booster Pump for Levey Well Damaged by Freeze.							
	2/8/2022	<0.495	2,050	1.31 J	<0.909	<0.877	1.31 J	20.7	
	2/16/2022	<0.495	1,670	0.974 J	<0.864	<0.834	0.974 J	18.3	
	2/25/2022	<0.495	1,280	1.43 J	<0.965	<0.932	1.43 J	19.9	
	3/3/2022	<0.495	2,160	1.86 J	<0.909	<0.877	1.86 J	18.1	
	3/9/2022	<0.495	1,680	1.77 J	<0.947	<0.914	1.77 J	18.4	
	3/14/2022	Booster Pump for Levey Well Repaired and Back on Running Full Time.							
	3/16/2022	<0.495	1,700	2.22 J	<0.915	<0.883	2.22 J	18.1	
3/24/2022	<0.495	1,330	1.29 J	<0.909	<0.877	1.29 J	19.1		
3/31/2022	<0.495	1,340	1.28 J	<0.938	<0.905	1.28 J	19.0		
4/6/2022	<0.495	1,720	1.00 J	<0.938	<0.905	1.00 J	18.1		
4/13/2022	<0.495	874	0.915 J	<0.906	<0.875	0.915 J	19.0		
4/20/2022	<0.495	1,060	1.06 J	<0.901	<0.869	1.06 J	18.6		
4/28/2022	<0.495	1,100	1.76 J	<0.915	<0.883	1.76 J	19.8		
5/5/2022	0.600 J	1,330	1.40 J	<0.920	<0.888	1.40 J	19.2		
5/10/2022	<0.495	1,320	1.63 J	<0.965	<0.932	1.63 J	16.8		
5/19/2022	<0.495	1,740	1.80 J	<0.915	<0.883	1.80 J	20.5		
5/26/2022	<0.495	2,650	1.02 J	<0.950	<0.917	1.02 J	18.1		
6/1/2022	<0.495	1,340	1.43 J	<0.909	<0.877	1.43 J	20.5		
6/9/2022	<0.495	1,080	1.23 J	<0.938	<0.905	1.23 J	19.8		
6/17/2022	<0.495	894	1.49 J	<0.895	<0.864	1.49 J	17.8		
6/23/2022	<0.495	1,270	1.25 J	<0.920	<0.888	1.25 J	18.0		
6/29/2022	<0.495	1,680	<0.935	<0.935	<0.902	<0.935	15.9		
7/7/2022	<0.495	1,190	0.912 J	<0.906	<0.875	0.912 J	23.0		
7/13/2022	<0.495	1,610	1.17 J	<0.947	<0.914	1.17 J	20.1		
7/20/2022	<0.495	1,360	1.07 J	<0.981	<0.947	1.07 J	19.8		
7/27/2022	<0.495	1,070	1.49 J	<0.975	<0.941	1.49 J	18.2		
8/4/2022	<0.495	1,570	1.31 J	<0.904	<0.872	1.31 J	19.2		
8/10/2022	<0.495	1,260	1.17 J	<0.932	<0.900	1.17 J	19.3		
8/18/2022	<0.495	1,280	1.43 J	7.62	<0.897	9.05	21.3		
8/24/2022	<5.00	1,300	1.18 J	<4.63	<4.63	1.18 J	18.0		
8/31/2022	1.00 J	1,290	1.08 J	<0.950	<0.917	1.08 J	20.0		
9/15/2022	<0.495	1,320	1.83 J	<1.07	<1.04	1.83 J	18.9		
9/22/2022	<0.495	1,320	1.56 J	<1.05	<1.01	1.56 J	20.9		
9/28/2022	<0.495	1,280	1.06 J	<1.05	<1.01	1.06 J	18.6		
10/4/2022	<0.495	1,670	1.11 J	<0.904	<0.872	1.11 J	17.6		
10/14/2022	<0.989	1,670	1.12 J	<0.915	<0.883	1.12 J	18.1		
10/19/2022	<0.495	814	1.46 J	<0.877	<0.846	1.46 J	18.3		
10/27/2022	<0.495	1,350	<0.988	<0.988	<0.954	<0.988	25.0		

NOTES:
°C - degrees celsius
mg/l - milligrams per liter
NE - not established
J - The target analyte was positively identified below the quantitation limit and above the detection limit.

TABLE 4 AIR SAMPLING (VOCs) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001																																						
Sample Designation	Date	Time	(ug/m3)																																			
			Acetone	Benzene	Bromomethane	Carbon disulfide	Chloromethane	2-Chlorotoluene	Cyclohexane	1,2-Dichloroethane	cis-1,2-Dichloroethene	Ethanol	Ethylbenzene	4-Ethyltoluene	Trichlorofluoromethane	Dichlorodifluoromethane	Heptane	n-Hexane	Isopropylbenzene	Methylene Chloride	Methyl Butyl Ketone	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Methyl methacrylate	Naphthalene	2-Propanol	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	1,1,1-Trichloroethane	Trichloroethylene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m&p-Xylene	o-Xylene	TPH (GC/MS) Low Fraction
Levey Well	1/25/2021	0823	229	<6.39	<7.76	9.52	<4.13	<10.3	575	<8.10	<7.93	324	<8.67	<9.82	<11.2	<17.0	299	980	<9.83	<6.94	<51.1	<36.9	<51.2	<8.19	<33.0	<30.7	<8.51	<13.6	<5.90	<18.8	<10.9	22.2	<9.82	<9.82	<7.04	<17.3	<8.67	17,500
	1/25/2021	1213	<2.97	<0.639	<0.776	<0.622	<0.413	<1.03	2.01	<0.810	<0.793	4.98	<0.867	<0.982	<1.12	<1.70	1.44	3.20	<0.983	<0.694	<5.11	<3.69	<5.12	<0.819	<33.0	<3.07	<0.851	<1.36	<0.590	<1.88	<1.09	<1.36	1.14	1.29	<0.704	<1.73	<0.867	<826
	1/28/2021	1316	14,800	<0.639	2.96	246	22.5	42.5	1,770	<0.810	<0.793	2,410	53.8	298	<1.12	2.03	1,220	2,890	150	<0.694	101	2,340	53.2	<0.819	<33.0	438	<0.851	72.6	<0.590	95.7	<1.09	<1.07	445	375	<0.704	246	147	61,100
	2/10/2021	1300	1,140	<12.8	<15.5	181	<8.26	<20.6	10,800	<16.2	<15.9	<23.8	44.2	426	<22.5	<19.8	4,040	14,000	92.4	<13.9	<102	79.0	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	66.3	<21.8	<21.4	334	584	<14.1	361	218	315,000
	2/24/2021	1045	<2.97	<0.639	<0.776	161	<0.413	<1.03	4,510	<0.810	9.83	<1.19	88.4	491	<1.12	<0.989	2,200	5,610	249	<0.694	<5.11	<3.69	<5.12	<0.819	<33.0	<3.07	<0.851	5.47	<0.590	101	<1.09	1.14	218	305	<0.704	633	388	114,000
	3/4/2021	1402	375	<3.19	<3.88	67.9	<2.07	<5.15	2,620	<4.05	<3.96	88.6	56.4	<4.91	<5.62	<4.95	847	4,690	176	<3.47	<25.6	72.0	<25.6	<4.09	22.8	<15.4	<4.25	<6.79	<2.95	49.3	<5.44	<5.36	1,460	913	<3.52	533	198	83,400
	3/10/2021	1050	<2.97	<0.639	<0.776	71.0	<0.413	<1.03	3,300	<0.810	<0.793	<1.19	61.1	1,070	1.26	<0.989	990	4,120	205	<0.694	<5.11	54.8	<5.12	<0.819	<3.30	<3.07	<0.851	<1.36	<0.590	55.4	<1.09	<1.07	947	825	<0.704	516	249	120,000
	3/17/2021	1135	806	<0.639	<0.776	95.6	<0.413	<1.03	3,160	<0.810	<0.793	50.2	63.3	444	1.38	<0.989	1,240	4,550	128	<0.694	<5.11	139	<5.12	<0.819	<3.30	46.5	<0.851	<1.36	<0.590	101	<1.09	<1.07	332	313	<0.704	432	179	88,800
	3/25/2021	1111	<2.97	<0.639	<0.776	<0.622	<0.413	<1.03	11,700	<0.810	<0.793	41.3	65.9	<0.982	<1.12	<0.989	2,500	12,800	157	<0.694	<5.11	<3.69	<5.12	<0.819	<3.30	<3.07	<0.851	<1.36	<0.590	67.4	<1.09	<1.07	424	359	<0.704	382	205	256,000
	3/31/2021	1055	1,880	<0.639	<0.776	<0.622	<0.413	<1.03	22,300	<0.810	<0.793	96.3	78.0	185	<1.12	<0.982	4,420	24,000	150	<0.694	<5.11	244	<5.12	<0.819	<3.30	<3.07	<0.851	17.5	<0.590	73.1	9.57	<1.07	292	265	<0.704	352	193	305,000
	4/8/2021	1205	2,350	843	<311	<249	<165	<412	30,500	<324	<317	2,830	<347	736	<450	<396	<327	64,500	<393	<278	<2,040	<1,470	<2,050	<328	<1,320	1,470	<340	<543	<236	<753	<435	<429	453	420	<282	737	<347	574,000
	4/15/2021	1228	1,200	<12.8	<15.5	97.7	<8.26	<20.6	41,000	<16.2	<15.9	98.0	91.9	447	<22.5	<19.8	4,950	98,000	134	<13.9	<102	206	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	101	<21.8	<21.4	197	198	<14.1	620	190	438,000
	4/21/2021	1340	639	<0.639	<0.776	<0.622	<0.413	<1.03	2,390	<0.810	<0.793	234	72.4	309	<1.12	<0.989	969	5,710	166	<0.694	<5.11	280	<5.12	<0.819	<3.30	127	<0.851	<1.36	<0.590	48.2	<1.09	<1.07	216	447	<0.704	296	225	<826
	4/28/2021	1215	1,210	<12.8	<15.5	134	<8.26	<20.6	6,650	<16.2	<15.9	343	129	1,540	<22.5	<19.8	<16.4	13,200	264	<13.9	<102	229	<102	<16.4	<66.0	143	<17.0	<27.2	<11.8	95.3	<21.8	<21.4	1,050	761	<14.1	954	313	261,000
	5/5/2021	1235	371	<12.5	<15.5	12.6	<8.26	<20.6	844	<16.2	<15.9	326	27.2	88.3	<22.5	<19.8	326	1,120	58.0	<13.9	<102	93.8	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	179	142	<14.1	185	65.0	273,000
	5/13/2021	1320	1,220	<12.8	<15.5	39.8	<8.26	<20.6	6,130	29.9	<15.9	456	88.4	545	<22.5	<19.8	2,300	7,300	228	<13.9	<102	226	<102	<16.4	<66.0	219	<17.0	<27.2	<11.8	62.5	<21.8	<21.4	1,230	756	<14.1	668	251	205,000
	5/19/2021	1445	1,700	<1.28	<1.55	<1.24	<0.826	<2.06	6,680	<1.62	<1.59	226	76.7	306	<2.25	<1.98	2,010	12,300	179	<1.39	122	200	<10.2	<1.64	<6.60	205	<1.70	<2.72	<1.18	50.5	<2.18	3.46	520	550	<1.41	577	195	175,000
	5/27/2021	1245	380	0.664	<0.776	<0.622	1.57	<1.03	1.14	<0.810	<0.793	61.30	3.68	7.07	1.51	2.64	9.98	157	<0.983	13.5	13.5	263	<0.819	<3.30	976	301	<1.36	149	86.3	<1.09	<1.07	15.4	4.37	<0.704	12.1	3.70	17,900	
	6/2/2021	1220	1,280	<12.8	<15.5	<12.4	<8.26	<20.6	5,480	<16.2	<15.9	317	78.5	241	<22.5	<19.8	1,500	6,840	162	<13.9	<102	188	<102	<16.4	<66.0	125	<17.0	<27.2	<11.8	47.1	<21.8	<21.4	555	356	<14.1	542	174	179,000
	6/10/2021	1150	3,470	<12.8	<15.5	106	<8.26	<20.6	2,260	<16.2	<15.9	722	21.6	169	<22.5	<19.8	507	3,020	48.1	<13.9	<102	295	<102	<16.4	<66.0	234	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	89.3	73.1	<14.1	127	49.4	95,800
	6/16/2021	1217	2,160	<0.639	<0.776	43.0	<0.413	<1.03	806	<0.810	<0.793	609	17.9	145	<1.12	<0.989	308	1,670	32.2	<0.694	35.6	251	<5.12	<0.819	<3.30	201	<0.851	<1.36	<0.590	29.3	<1.09	<1.07	85.9	58.9	<0.704	88.9	34.4	32,400
	6/22/2021	1240	1,190	<6.39	<7.76	<6.22	<4.13	<10.3	2,440	<8.10	<7.93	347	9.49	78.0	<11.2	<9.89	<8.18	7,510	20.4	<6.94	<51.1	168	<51.2	<8.19	<33.0	<30.7	<8.51	<13.6	<5.90									

TABLE 4 AIR SAMPLING (VOCs) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001																																						
Sample Designation	Date	Time	(ug/m3)																																			
			Acetone	Benzene	Bromomethane	Carbon disulfide	Chloromethane	2-Chlorotoluene	Cyclohexane	1,2-Dichloroethane	cis-1,2-Dichloroethene	Ethanol	Ethylbenzene	4-Ethyltoluene	Trichlorofluoromethane	Dichlorodifluoromethane	Heptane	n-Hexane	Isopropylbenzene	Methylene Chloride	Methyl Butyl Ketone	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Methyl methacrylate	Naphthalene	2-Propanol	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	1,1,1-Trichloroethane	Trichloroethylene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m&p-Xylene	o-Xylene	TPH (GC/MS) Low Fraction
Levey Well	1/3/2022	0756	<297	<63.9	<77.6	<62.2	<41.3	<103	108,000	<81.0	<79.3	1,200	<86.7	<98.2	<112	<98.9	234,000	606,000	<98.3	<69.4	<511	<369	<512	<81.9	<330	6,610	<85.1	<136	<59.0	<188	<109	<107	<98.2	<98.2	<70.4	<173	<86.7	4,020,000
		0759	Initiate Vacuum Recovery Event																																			
		0823	<59.4	<12.8	<15.5	<12.4	407	<20.6	3,960	<16.2	<15.9	<47.1	<17.3	<19.6	<22.5	<19.8	12,800	28,200	<19.7	<13.9	<102	<73.7	<102	<16.4	<66.0	62.9	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	<19.6	<19.6	<14.1	<34.7	<17.3	177,000
		0904	<14.9	<3.19	<3.88	<3.11	<2.07	<5.15	2,240	<4.05	<3.96	<11.8	<4.34	<4.91	<5.62	<4.95	6,130	17,800	<4.92	<3.47	<25.6	<18.4	<25.6	<4.09	<16.5	19.3	<4.25	<6.79	<2.95	<9.42	<5.44	<5.36	8.25	5.64	<3.52	<8.67	<4.34	101,000
		0920	Vacuum Recovery Event Terminated																																			
	1/6/2022	1031	<59.4	<12.8	<15.5	<12.4	<8.26	<20.6	4,580	<16.2	<15.9	<47.1	<17.3	<19.6	<22.5	<19.8	5,690	15,800	<19.7	<13.9	<102	<73.7	<102	<16.4	<66.0	87.5	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	22.7	<19.6	<14.1	<34.7	<17.3	188,000
		0000	<297	<63.9	<77.6	<62.2	<41.3	<103	10,600	<81.0	<79.3	<236	<86.7	<98.2	<112	<98.9	20,500	130,000	<98.3	110	<511	<369	<512	<81.9	<330	4,230	<85.1	<136	<59.0	<188	<109	<107	<98.2	<98.2	<70.4	<173	<86.7	508,000
	1/12/2022	1352	31,400	<12.8	<15.5	<12.4	<8.26	<20.6	164,000	<16.2	<15.9	<47.1	115	491	<22.5	<19.8	342,000	1,680,000	98.8	<13.9	<102	5,570	<102	<16.4	85.9	81,900	<17.0	<27.2	<11.8	263	<21.8	<21.4	400	433	<14.1	341	156	6,820,000
	1/17/2022	0852	14,900	<639	<776	<622	<413	<1,030	119,000	<810	<793	<2,360	<867	<982	<1,120	<989	160,000	1,440,000	<983	<694	<5,110	<3,690	<5,120	<819	<3,300	25,800	<851	<1,360	<590	<1,880	<1,090	<1,070	<982	<982	<704	<1,730	<867	6,110,000
		0853	Initiate Vacuum Recovery Event																																			
		0919	227	<0.639	<0.776	<0.622	<0.413	<1.03	3,650	<0.810	<0.793	19.8	2.15	1.70	1.52	1.84	6,260	19,100	1.22	<0.694	<5.11	<3.69	<5.12	<0.819	<3.30	202	<0.851	<1.36	<0.590	8.32	<1.09	<1.07	2.84	2.87	<0.704	5.20	2.15	132,000
		1004	90.3	<0.639	<0.776	<0.622	1.30	<1.03	747	<0.810	<0.793	56.2	2.58	4.13	1.40	2.60	1,610	4,300	2.46	<0.694	<5.11	16.4	<5.12	<0.819	<3.30	114	<0.851	2.69	<0.590	15.6	<1.09	<1.07	11.5	8.44	<0.704	7.50	3.13	31,600
		1021	Vacuum Recovery Event Terminated																																			
	1/19/2022	1134	466	<0.639	<0.776	<0.622	1.64	<1.03	2,400	<0.810	<0.793	16.8	5.42	9.67	1.38	2.14	4,620	10,800	5.26	<0.694	<5.11	54.3	<5.12	<0.819	3.42	494	<0.851	27.5	<0.590	23.8	<1.09	<1.07	20.8	18.7	<0.704	17.7	7.46	95,400
		1208	454	<31.9	<38.8	<31.1	<20.7	<51.5	11,300	<40.5	<39.6	149	<43.4	94.2	<56.2	<49.5	28,800	171,000	<49.2	<34.7	<256	<184	<256	966	<165	3,740	<42.5	<67.9	<29.5	<94.2	<54.4	<53.6	81.0	221	<35.2	<86.7	<43.4	508,000
	1/26/2022	1251	<59.4	<12.8	<15.5	<12.4	<8.26	<20.6	28,900	<16.2	<15.9	<47.1	<17.3	<19.6	<22.5	<19.8	22,900	313,000	<22.5	<13.9	<102	<73.7	<102	<16.4	<66.0	248	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	<19.6	<19.6	<14.1	<34.7	<17.3	1,180,000
	2/2/2022	0921	4,040	5,940	<155	<124	<82.6	<206	229,000	<162	<159	<471	195	<196	<225	<198	217,000	8,710,000	<197	<139	<1020	1,360	<1,020	<164	<660	10,800	<170	<272	<118	1,220	<218	<214	<196	<196	<141	481	<173	3,620,000
		0922	Initiate Vacuum Recovery Event																																			
		0950	337	415	<15.5	<12.4	<8.26	<20.6	16,700	<16.2	<15.9	<47.1	147	<19.6	<22.5	<19.8	36,200	114,000	<19.7	<13.9	<102	231	<102	<16.4	<66.0	88.2	<17.0	<27.2	<11.8	313	<21.8	<21.4	27.0	<19.6	<14.1	370	108	409,000
		1030	56.8	29.9	<0.776	<0.622	<0.413	<1.03	2,280	<0.810	<0.793	10.5	25.2	<0.982	<1.12	2.47	5,440	9,380	2.05	<0.694	<5.11	34.5	<5.12	<0.819	<3.30	30.2	<0.851	<1.36	<0.590	46.3	<1.09	<1.07	9.18	6.58	<0.704	62.9	17.6	71,500
		1047	Vacuum Recovery Event Terminated																																			
	2/8/2022	1158	80.8	29.7	<0.776	<0.622	<0.413	<1.03	2,750	<0.810	<0.793	4.13	19.1	<0.982	<1.12	2.58	5,850	8,670	1.82	<0.694	<5.11	36.9	<5.12	<0.819	<3.30	43.0	<0.851	<1.36	<0.590	38.8	<1.09	<1.07	7.80	5.35	<0.704	46.8	13.0	59,500
		1200	88.6	<0.639	<0.776	<0.622	<0.413	<1.03	1,310	<0.810	<0.793	<2.36	27.2	<0.982	<1.12	<0.989	2,640	13,700	14.5	<0.694	<5.11	15.5	<5.12	<0.819	3.64	76.2	<0.851	3.38	<0.590	12.3	<1.09	<1.07	43.8	46.5	<0.704	91.9	39.4	83,000
	2/16/2022	1224	215	<12.8	<15.5	<12.4	<8.26	<20.6	37,500	<16.2	<15.9	<47.1	<17.3	22.1	<22.5	<19.8	7,280	62,800	<19.7	<13.9	<102	<73.7	<102	<16.4	<66.0	156	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	23.1	19.6	<14.1	38.4	<17.3	272,000
	2/23/2022	1021	1,950	<0.639	<0.776	<0.622	<0.413	<1.03	30,900	<0.810	<0.793	120	3.00	<0.982	<1.12	<0.989	5,360	176,000	<0.983	<0.694	<5.11	<3.69	<5.12	<0.819	<3.30	<3.07	<0.851	<1.36	<0.590	73.8	<1.09	<1.07	1.84	1.47	<0.704	3.42	1.12	261,000
		1022	Initiate Vacuum Recovery Event																																			
		1043	104	101	<0.776	<0.622	1.44	<1.03	3,280	<0.810	<0.793	62.4	4.60	1.30	1.64	2.42	1,040	2,500	<0.983	<0.694	<5.11	34.2	<5.12	<0.819	<3.30	14.2	<0.851	<1.36	<0.590	57.6	<1.09	<1.07	3.47	3.29	<0.704	6.89	1.96	30,000
		1118	<29.7	25.9	<7.76	<6.22	<4.13	<10.3	737	<8.10	<7.93	42.2	<8.67	<9.82	<11.2	<9.89	290	610	<9.83	<6.94	<51.1	<36.9	<51.2	<8.19	<33.0	<30.7	<8.51	<13.6	<5.90	20.3	<10.9	<10.7	<9.82	<9.82	<7.04	<17.3	<8.67	8,510
	2/25/2022	1134	Vacuum Recovery Event Terminated																																			
		1241	<2.97	<0.639	<0.776	<0.622	1.40	<1.03	1,380	<0.810	<0.793	<2.36	<0.867	<0.982	1.58	1.76	272	1,290	<0.983	<0.694	<5.11	<3.69	<5.12	<0.819	<3.30	<3.07	<0.851	<1.36	<0.590	7.61	<1.09	<1.07	<0.982	<0.982	<0.704	<1.73	<0.867	13,200
		1145	250	<0.639	<0.776	21.2	0.413	<1.03	12,400	<0.810	<0.793	4.68	2.41	4.13	<1.12	<0.989	3,740	26,100	2.23	<0.694	<5.11	46.9	<5.12	<0.819	3.50	25.8	<0.851	<1.36	<0.590	9.12	<1.09	<1.07	7.85	6.23	<0.704	8.15	2.49	107,000
		1405	<149	<31.9	<38.8	<31.1	<20.7	<51.5	520	<40.5	<39.6	837	<43.4	<49.1	<56.2	<49.5	220	3,390	<49.2	47.6	<256	<184	<256	766	<165	8,480	<42.5	<67.9	<29.5	<94.2	<54.4	<53.6	<49.1	<49.1	<35.2	<86.7	<43.4	<41,300
		2/28/2022	1406	Initiate Vacuum Recovery Event																																		
	1510		<2.97	1.79	<0.776	<0.622	<0.413	<1.03	305	<0.810	<0.793	7.45	2.05	2.40	<1.12	2.13	182	511	1.12	<0.694	<5.11	10.6	<5.12	<0.819	<3.30	25.6	<0.851	<1.36	<0.590	3.74	<4.66	<1.07	4.96	4.91	<0.704	3.20	1.44	6,440
	1428		<149	<31.9	<38.8	<31.1	<20.7	<51.5	654	<40.5	<39.6	684	<43.4	<49.1	<56.2	<49.5	263	2,520	<49.2	38.5																		

TABLE 4 AIR SAMPLING (VOCs) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001																																						
Sample Designation	Date	Time	(ug/m3)																																			
			Acetone	Benzene	Bromomethane	Carbon disulfide	Chloromethane	2-Chlorotoluene	Cyclohexane	1,2-Dichloroethane	cis-1,2-Dichloroethene	Ethanol	Ethylbenzene	4-Ethyltoluene	Trichlorofluoromethane	Dichlorodifluoromethane	Heptane	n-Hexane	Isopropylbenzene	Methylene Chloride	Methyl Butyl Ketone	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Methyl methacrylate	Naphthalene	2-Propanol	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	1,1,1-Trichloroethane	Trichloroethylene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m&p-Xylene	o-Xylene	TPH (GC/MS) Low Fraction
Levey Well	5/5/2022	1454	<1,190	<256	<311	<249	<165	<412	30,500	<324	<317	<943	<347	<393	<450	<396	47,000	673,000	<393	<278	<2,040	<1,470	<2,050	<328	<1,320	8,900	<340	<543	<236	<753	<435	<429	<393	<393	<282	<694	<347	1,430,000
	5/9/2022	0958	<1,190	<256	<311	<249	<165	<412	49,200	<324	<317	2,660	<347	<393	<450	<396	66,300	850,000	<393	<278	<2,040	3,480	<2,050	<328	<1,320	26,100	<340	<543	<236	<753	<435	<429	<393	<393	<282	<694	<347	2,380,000
		1000	Initiate Vacuum Recovery Event																																			
		1020	333	<0.639	<0.776	1.34	1.81	<1.03	995	<0.810	<0.793	42.4	4.07	17.1	<1.12	1.20	2,530	8,780	<0.983	<0.694	<5.11	203	<5.12	<0.819	5.09	76.2	<0.851	<1.36	<0.590	<1.88	<1.09	<1.07	12.9	20.8	<0.704	7.02	5.94	54,100
		1057	90.8	<0.639	<0.776	<0.622	2.85	<1.03	159	<0.810	<0.793	13.3	<0.867	1.08	1.31	1.81	385	1,040	<0.983	<0.694	<5.11	33.6	<5.12	<0.819	<3.30	13.7	<0.851	<1.36	<0.590	<1.88	<1.09	<1.07	1.54	2.56	<0.704	<1.73	1.03	8,220
		1105	Vacuum Recovery Event Terminated																																			
		1218	130	1.41	6.83	31.0	15.5	<1.03	3,090	<0.810	<0.793	32.2	3.73	7.02	<1.12	<0.989	6,260	4,830	1.60	<0.694	<5.11	193	<5.12	<0.819	<3.30	403	<0.851	<1.36	<0.590	6.37	<1.09	<1.07	8.59	15.2	<0.704	5.64	5.03	124,000
	5/19/2022	1315	<238	<51.1	<62.1	<49.8	<33.0	<82.5	104,000	<64.8	<63.4	1,070	<69.4	<78.5	<89.9	<79.1	183,000	1,340,000	<78.7	105	<409	<295	<409	<65.5	<264	4,130	<68.1	<109	<47.2	<151	<87.0	<85.7	<78.5	<78.5	<56.3	<139	<69.4	4,750,000
	5/23/2022	1015	12,100	<51.1	<62.1	<49.8	<33.0	<82.5	558,000	<96.2	<63.4	<189	<69.4	633	<89.9	<79.1	912,000	8,140,000	<78.7	<55.6	<409	14,100	<409	<65.5	<264	7,740	<68.1	<109	<47.2	<151	<87.0	<85.7	376	854	<56.3	<139	<69.4	27,600,000
		1017	Initiate Vacuum Recovery Event																																			
		1100	<238	<51.1	<62.1	<49.8	<33.0	<82.5	13,400	<64.8	<63.4	549	<69.4	158	<89.9	<79.1	70,800	263,000	<78.7	<55.6	<409	1,090	<409	<65.5	<264	7,450	<68.1	<109	<47.2	<151	<87.0	<85.7	86.9	215	<56.3	<139	<69.4	702,000
		1200	927	<12.8	<15.5	<12.4	<10.6	<20.6	6,410	<16.2	<15.9	196	<17.3	185	<22.5	<19.8	15,200	50,400	<19.7	<13.9	<102	590	<102	<16.4	<66.0	263	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	121	271	<14.1	<34.7	<17.3	450,000
		1215	Vacuum Recovery Event Terminated																																			
		1355	4,350	<51.1	<62.1	<49.8	88.6	<82.5	16,300	<64.8	<63.4	562	<69.4	146	<89.9	<79.1	47,000	154,000	<78.7	<55.6	<409	1,580	<409	<65.5	<264	7,520	<68.1	<109	<47.2	<151	<87.0	<85.7	85.9	205	<56.3	<139	<64.4	785,000
	5/26/2022	1250	49,400	<1,280	<1,550	<1,240	<826	<2,060	196,000	<1,620	<1,590	12,900	<1,730	<1,960	<2,250	<1,980	336,000	28,000,000	<1,970	<1,390	<10,200	8,230	<10,200	<1,640	<6,600	161,000	<1,700	<2,720	<1,180	<3,770	<2,180	2,330	<1,960	<1,960	<1,410	<3,470	<1,730	8,260,000
	6/1/2022	1405	8,290	<256	<311	<249	<165	<412	444,000	<324	<317	1,420	<347	<393	<450	<396	634,000	4,580,000	<393	<278	<2,040	6,100	<2,050	<328	<1,320	14,900	<340	<543	<236	<753	<435	<429	<393	<393	<282	<694	<347	22,600,000
	6/8/2022	1033	<23,800	<5,100	<6,210	<4,980	<3,300	<8,250	231,000	<6,480	<6,340	28,800	<6,940	<7,850	<8,990	<7,910	470,000	3,700,000	<7,870	<5,560	<40,900	<29,500	<40,900	18,600	<26,400	531,000	<6,810	<10,900	<4,720	<15,100	<8,700	<8,570	<7,850	<7,850	<5,630	<13,900	<6,940	15,900,000
		1035	Initiate Vacuum Recovery Event																																			
		1058	<59.4	<12.8	<15.5	<12.4	<8.26	<20.6	4,340	<16.2	<15.9	60.9	30.8	56.4	<22.5	<19.8	13,300	32,900	<19.7	<13.9	<102	97.0	<102	<16.4	<66.0	166	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	70.7	135	<14.1	37.9	30.9	220,000
		1138	<2.97	2.17	<0.776	9.65	1.80	<1.03	1,390	<0.810	<0.793	31.7	11.4	28.8	1.31	2.37	4,620	906	3.85	<0.694	<5.11	53.4	<5.12	<0.819	4.45	72.5	<0.851	1.89	<0.590	13.0	<1.09	3.89	36.2	60.4	<0.704	16.3	12.5	98,700
		1153	Vacuum Recovery Event Terminated																																			
		1300	<59.4	<12.8	17.5	30.3	45.4	<20.6	14,300	<16.2	<15.9	83.9	24.4	34.8	<22.5	<19.8	45,000	135,000	<19.7	<13.9	<102	985	<102	<16.4	<66.0	804	<17.0	<27.2	<11.8	40.7	<21.8	<21.4	43.2	83.9	<14.1	35.3	27.8	1,020,000
	6/9/2022	1333	<238	<51.1	<62.1	53.2	<33.0	<82.5	30,900	<64.8	<63.4	1,250	<69.4	<78.5	<89.9	<79.1	76,100	279,000	<78.7	87.5	<409	1,540	<409	<65.5	<264	12,500	<68.1	<109	<47.2	<151	<87.0	<85.7	<78.5	223	<56.3	<139	79.3	1,220,000
	6/12/2022	1315	<59.4	<12.8	<15.5	<12.4	<8.26	<20.6	5,960	<16.2	<15.9	790	<17.3	<19.6	<22.5	<19.8	7,930	108,000	<19.7	85.1	<102	563	<102	520	<66.0	11,700	<17.0	46.0	<11.8	64.8	<21.8	<21.4	<19.6	26.7	<14.1	<34.7	<17.3	271,000
	6/20/2022	1015	<238	<51.1	<62.1	<49.8	<33.0	<82.5	189,000	<64.8	<63.4	<189	<69.4	242	<89.9	<79.1	319,000	3,240,000	<78.7	<55.6	<409	7,960	<409	<65.5	<264	12,700	<68.1	<109	<47.2	<151	<87.0	<85.7	124	314	<56.3	157	105	10,600,000
		1040	Initiate Vacuum Recovery Event																																			
		1148	137	<12.8	<15.5	<12.4	<8.26	<20.6	1,390	<16.2	<15.9	<47.1	<17.3	57.4	<22.5	<19.8	3,870	14,200	<19.7	<13.9	<102	130	<102	<16.4	<66.0	112	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	39.3	78.0	<14.1	<34.7	<17.3	92,900
		1256	95.5	<0.639	<0.776	<0.622	<0.413	<1.03	475	<0.810	<0.793	19.0	<0.867	15.5	<1.12	2.19	1,060	2,440	<0.983	<0.694	<5.11	64.9	<5.12	<0.819	<3.30	47.2	<0.851	<1.36	<0.590	<1.88	<1.09	<1.07	23.1	36.5	<0.704	5.68	5.46	35,100
		1257	Vacuum Recovery Event Terminated																																			
	6/23/2022	1305	14,000	<639	<776	<622	<413	<1,030	48,600	<810	<793	3,260	<867	<982	<1,120	<989	107,000	702,000	<983	<694	<5,110	<3,690	<5,120	<819	<3,300	48,700	<851	<1,360	<590	<1,880	<1,090	<1,070	<982	<982	<704	<1,730	<867	2,210,000
6/29/2022	1255	27,300	<51.1	<62.1	161	<33.0	<82.5	339,000	<64.8	<63.4	1,690	<69.4	314	<89.9	<79.1	450,000	3,320,000	<78.7	<55.6	<409	19,000	<409	<65.5	<264	13,600	<68.1	<109	<47.2	<151	<87.0	<85.7	149	453	<56.3	<139	<69.4	19,600,000	
7/7/2022	1340	15,500	<1,190	<311	<249	<165	<412	166,000	<324	<317	3,190	<347	<393	<450	<396	303,000	2,470,000	<393	<278	<2,040	12,200	<2,050	<328	<1,320	14,500	<340	<543	<236	<753	<435	<429	<393	<393	<282	<694	<347	6,650,000	
7/13/2022	1315	<238	<51.1	<62.1	<49.8	<33.0	<82.5	<55.1	<64.8	<63.4	<189	<69.4	258	<89.9	<79.1	781,000	6,030,000	<78.7	<55.6	<409	28,100	<409	<65.5	<264	6,640	<68.1	<109	<47.2	<151	<87.0	<85.7	266	623	<56.3	<139	251	24,500,000	
7/18/2022	1135	22,000	<256	<311	<249	<165	<412	995,000	<324	<317	<943	<347	479	<450	<396	1,020,000	12,300,000	<393	<278	<2,040	19,200	<2,050	<328	<1,320	13,900	<340	<543	<236	<753	<435	<429	<393	667	<282	<694	<347	46,700,000	
	1224	Initiate Vacuum Recovery Event																																				
	1355	356	693	<15.5	14.8	<8.26	<20.6	4,370	<16.2	<15.9	<47.1	806	135	<22.5	<19.8	3,930	24,000	52.1	<13.9	<102	363	<102	<16.4	<66.0	131	<17.0	<27.2	<11.8	2,230	<21.8	<21.4	153	161	<14.1	494	170	258,000	
	1435																																					

TABLE 4 AIR SAMPLING (VOCs) ANALYTICAL DATA SUMMARY Levey Well Oxy Permian Ltd. Hobbs, New Mexico Ensolum Project No. 03B1417001																																						
Sample Designation	Date	Time	(ug/m3)																																			
			Acetone	Benzene	Bromomethane	Carbon disulfide	Chloromethane	2-Chlorotoluene	Cyclohexane	1,2-Dichloroethane	cis-1,2-Dichloroethene	Ethanol	Ethylbenzene	4-Ethyltoluene	Trichlorofluoromethane	Dichlorodifluoromethane	Heptane	n-Hexane	Isopropylbenzene	Methylene Chloride	Methyl Butyl Ketone	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Methyl methacrylate	Naphthalene	2-Propanol	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	1,1,1-Trichloroethane	Trichloroethylene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m&p-Xylene	o-Xylene	TPH (GC/MS) Low Fraction
Levey Well	8/18/2022	1231	<238	<51.1	<62.1	246	<33.0	<82.5	146,000	<64.8	<63.4	769	<69.4	<78.5	<89.9	<79.1	295,000	1,370,000	<78.7	63.9	<409	6,250	<409	<65.5	<264	15,500	<68.1	<109	<47.2	<151	<87.0	<85.7	<78.5	148	<56.3	<139	95.4	7,520,000
	8/24/2022	1147	<297	<63.9	<77.6	<62.2	<41.3	<103	585,000	<81.0	<79.3	<236	<86.7	<98.2	<112	<98.9	1,050,000	8,950,000	<98.3	<69.4	<511	13,900	<512	<81.9	<330	13,500	<85.1	<136	<59.0	<188	<109	<107	<98.2	<98.2	<70.4	<173	<86.7	40,800,000
	8/31/2022	1247	132,000	<256	<311	<249	<165	<412	71,300	<324	<317	1,430	<347	<393	<450	<396	112,000	959,000	<393	<278	<2,040	3,660	5,530	<328	<1,320	16,500	<340	<543	<236	<753	<435	<429	<393	<393	<282	<694	<347	2,480,000
	9/8/2022	1247	57,500	<1,280	<1,550	<1,240	<826	<2,060	403,000	<1,620	<1,590	5,640	<1,730	<1,960	<2,250	<1,980	646,000	6,030,000	<1,970	<1,390	<10,200	46,600	<10,200	<1,640	<6,600	30,200	<1,700	<2,720	<1,180	<3,770	<2,180	<2,140	<1,960	<1,960	49,700	<3,470	<1,730	19,800,000
	9/15/2022	1342	<149	<31.9	<38.8	47.0	<20.7	<51.5	29,100	<40.5	<39.6	1,330	<43.4	<49.1	<56.2	<49.5	59,700	353,000	<49.2	77.8	<256	1,350	<256	<40.9	<165	6,070	<42.5	80.1	<29.5	<94.2	<54.4	<53.6	<49.1	<49.1	<35.2	<86.7	<43.4	830,000
	9/22/2022	1337	151,000	<2,560	<3,110	<2,490	<1,650	<4,120	554,000	<3,240	<3,170	288,000	3,590	<3,930	<4,500	<3,960	573,000	35,200,000	<3,930	<2,780	<20,400	57,200	<20,500	7,700	<13,200	6,930,000	4,110	33,800	<2,360	17,100	<4,350	<4,290	6,090	<3,930	<2,820	14,000	6,680	27,700,000
	9/26/2022	1046	39,900	<639	<776	<622	<413	<1,030	641,000	<810	<793	5,710	<867	<982	<1,120	<989	1,060,000	9,450,000	<983	<694	<5,110	20,100	<5,120	<819	<3,300	38,100	<851	<1,360	<590	<1,180	<1,090	<1,070	<982	<982	<704	<1,730	<867	19,600,000
		1255	Initiate Vacuum Recovery Event																																			
		1403	337	<12.8	<15.5	<12.4	<8.26	<20.6	4,170	<16.2	<15.9	<47.1	<17.3	<19.6	<22.5	<19.8	4,830	33,700	<19.7	<13.9	<102	292	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	<19.6	<19.6	<14.1	<34.7	<17.3	189,000
		1512	116	<12.8	<15.5	<12.4	<8.26	<20.6	830	<16.2	<15.9	68.1	<17.3	<19.6	<22.5	<19.8	986	4,120	<19.7	<13.9	<102	104	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	<19.6	<19.6	<14.1	<34.7	<17.3	39,100
		1512	Vacuum Recovery Event Terminated																																			
		1609	297	<12.8	<15.5	<12.4	<8.26	<20.6	2,100	<16.2	<15.9	<47.1	<17.3	<19.6	<22.5	<19.8	2,380	12,700	<19.7	<13.9	<102	330	<102	<16.4	<66.0	109	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	<19.6	23.7	<14.1	<34.7	<17.3	88,400
	9/28/2022	1215	14,200	<63.9	<77.6	136	<41.3	<103	118,000	<81.0	<79.3	<236	<86.7	<98.2	<112	<98.9	241,000	1,110,000	<98.3	<69.4	<511	6,840	<512	<81.9	<330	6,660	<85.1	<136	<59.0	<188	<109	<107	<98.2	<98.2	<70.4	<173	<86.7	4,790,000
	10/4/2022	1327	<29,700	<6,390	<7,760	<6,220	<4,130	<10,300	499,000	<8,100	<7,930	766,000	<8,670	<9,820	<11,200	<9,890	908,000	6,490,000	<9,830	<6,940	<51,100	66,900	<51,200	188,000	<33,000	3,440,000	<8,510	27,500	<5,900	<18,800	<10,900	<10,700	<9,820	<9,820	<7,040	<17,300	<8,670	32,000,000
	10/10/2022	1226	15,900	<128	<155	128	<82.6	<206	413,000	<162	<159	2,070	<173	<196	<225	<198	658,000	7,760,000	<197	<139	<1,020	11,900	<1,020	<164	<660	9,510	<170	<272	<118	<377	<218	1,390	<196	206	<141	<347	<173	24,600,000
		1230	Initiate Vacuum Recovery Event																																			
		1326	71.1	1.52	<0.776	0.741	9.21	<1.03	1,400	<0.810	<0.793	14.8	<0.867	3.48	<1.12	1.36	3,850	14,900	<0.983	0.913	<5.11	109	<5.12	<0.819	<3.30	8.50	<0.851	<1.36	<0.590	3.08	<1.09	<1.07	5.79	8.05	<0.704	4.94	2.65	124,000
		1438	94.8	0.923	<0.776	0.672	2.58	<1.03	1,280	<0.810	<0.793	16.3	<0.867	2.65	<1.12	1.63	3,040	13,400	<0.983	0.934	<5.11	92.0	<5.12	<0.819	<3.30	120	<0.851	<1.36	<0.590	1.96	<1.09	<1.07	2.68	6.43	<0.704	<0.867	1.82	104,000
		1438	Vacuum Recovery Event Terminated																																			
		1538	<2.97	4.12	<0.776	15.5	16.6	<1.03	14,500	<0.810	<0.793	120	<0.867	23.3	<1.12	<0.989	34,700	122,000	<0.983	<0.694	<5.11	263	<5.12	<0.819	<3.30	49.2	<0.851	<1.36	<0.590	9.15	<1.09	<1.07	19.6	56.0	<0.704	12.7	17.6	698,000
	10/14/2022	1136	21,900	<128	<155	181	<82.6	<206	121,000	<162	<159	2,000	<173	<196	<225	<198	193,000	2,850,000	<197	<139	<1,020	8,880	<1,020	<164	<660	6,490	<170	<272	<118	<377	<218	<214	<196	<196	<141	<347	<173	3,990,000
	10/19/2022	1350	10,600	<63.9	<77.6	<62.2	<41.3	<103	382,000	<81.0	<79.3	<236	<86.7	<98.2	<112	<98.9	769,000	6,280,000	<98.3	<69.4	<511	9,170	<512	<81.9	<330	6,190	<85.1	760	<59.0	<188	<109	<107	<98.2	<98.2	<70.4	<173	<86.7	22,600,000
	10/24/2022	1100	13,700	<63.9	<77.6	<62.2	<41.3	<103	88,200	<81.0	<79.3	6,200	211	339	<112	<98.9	174,000	1,030,000	<98.3	<69.4	<511	6,900	<512	<81.9	<330	12,300	<170	<136	<59.0	1,020	<109	<107	312	226	<70.4	806	273	<4,130,000
		1100	Initiate Vacuum Recovery Event																																			
		1208	<59.4	15.4	<15.5	<12.4	<8.26	<20.6	<13.8	<16.2	<15.9	207	22.1	<19.6	<22.5	<19.8	22.2	62.8	<19.7	<13.9	<102	<73.7	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	96.8	<21.8	<21.4	<19.6	<19.6	<14.1	43.3	17.4	<16,500
		1308	97.4	<0.639	<0.776	4.45	2.07	<1.03	149	<0.810	<0.793	57.9	1.21	<0.982	<1.12	2.45	442	1,290	<0.983	<0.694	<5.11	61.3	<5.12	<0.819	<3.30	31.0	<0.851	<1.36	<0.590	<1.88	<1.09	<1.07	2.36	5.45	<0.704	3.86	1.53	9,670
		1308	Vacuum Recovery Event Terminated																																			
		1408	335	<0.639	<0.776	<622	<413	<1.03	2,270	<0.810	<0.793	<2.36	<0.867	<0.982	<1.12	<0.989	3,730	18,400	<0.983	<0.694	<5.11	234	<5.12	<0.819	<3.30	<3.07	<0.851	<1.36	<0.590	<1.88	<1.09	<1.07	2.62	5.60	<0.704	4.55	2.10	74,400
10/27/2022	1337	7,680	<639	<776	<622	<413	<1,030	33,300	<810	<793	4,530	<867	<982	<1,120	<989	49,100	348,000	<983	<694	<5,110	<3,690	<5,120	<819	<3,300	17,900	<851	<1,360	<590	<1,880	<1,090	<1,070	<982	<982	<704	<1,730	<867	1,670,000	



APPENDIX C

Laboratory Data Sheets and Chain-of-Custody Documentation



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-19956-1

Laboratory Sample Delivery Group: Hobbs NM

Client Project/Site: Levey Well Hobbs, NM - 03B1417001

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/10/2022 3:01:18 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

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results through



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Laboratory Job ID: 880-19956-1
SDG: Hobbs NM

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Definitions/Glossary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

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)

Definitions/Glossary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Case Narrative

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Job ID: 880-19956-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-19956-1**

Receipt

The sample was received on 10/4/2022 3:47 PM. 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 1.3°C

GC/MS VOA

Method 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 860-71899 recovered outside control limits for the following analytes: Trichlorofluoromethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-71899 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D: The method blank for analytical batch 860-72008 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Bromide, Chloride and Sulfate analytical batch 860-72008 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFMS: The method blank for analytical batch 860-72009 contained Nitrite as N above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Nitrite as N analytical batch 860-72009 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Metals

Method 200.7: Due to the high concentration of CALCIUM, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-72138 and analytical batch 860-72231 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

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

General Chemistry

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

Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-19956-1

Date Collected: 10/04/22 11:45

Matrix: Water

Date Received: 10/04/22 15:47

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00269		0.00100	0.000533 mg/L			10/05/22 13:39	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/05/22 13:39	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/05/22 13:39	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/05/22 13:39	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/05/22 13:39	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/05/22 13:39	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/05/22 13:39	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/05/22 13:39	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/05/22 13:39	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/05/22 13:39	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/05/22 13:39	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/05/22 13:39	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/05/22 13:39	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/05/22 13:39	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/05/22 13:39	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/05/22 13:39	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/05/22 13:39	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/05/22 13:39	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/05/22 13:39	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/05/22 13:39	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/05/22 13:39	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/05/22 13:39	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/05/22 13:39	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/05/22 13:39	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/05/22 13:39	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/05/22 13:39	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/05/22 13:39	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/05/22 13:39	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/05/22 13:39	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/05/22 13:39	1
Ethylbenzene	0.0104		0.00100	0.000411 mg/L			10/05/22 13:39	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/05/22 13:39	1
Isopropylbenzene	0.00492		0.00100	0.000613 mg/L			10/05/22 13:39	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/05/22 13:39	1
m,p-Xylenes	0.0427		0.0100	0.00124 mg/L			10/05/22 13:39	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/05/22 13:39	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/05/22 13:39	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/05/22 13:39	1
N-Propylbenzene	0.00239		0.00100	0.000498 mg/L			10/05/22 13:39	1
o-Xylene	0.00620		0.00100	0.000551 mg/L			10/05/22 13:39	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/05/22 13:39	1
sec-Butylbenzene	0.000944	J	0.00100	0.000468 mg/L			10/05/22 13:39	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/05/22 13:39	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/05/22 13:39	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/05/22 13:39	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/05/22 13:39	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/05/22 13:39	1
Toluene	0.0221		0.00100	0.000475 mg/L			10/05/22 13:39	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/05/22 13:39	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-19956-1
Date Collected: 10/04/22 11:45 Matrix: Water
Date Received: 10/04/22 15:47

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/05/22 13:39	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/05/22 13:39	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/05/22 13:39	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/05/22 13:39	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/05/22 13:39	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/05/22 13:39	1
Trichlorofluoromethane	<0.000638	U *	0.00100	0.000638 mg/L			10/05/22 13:39	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/05/22 13:39	1
1,2,4-Trimethylbenzene	0.00963		0.00100	0.000417 mg/L			10/05/22 13:39	1
1,3,5-Trimethylbenzene	0.00304		0.00100	0.000456 mg/L			10/05/22 13:39	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/05/22 13:39	1
Xylenes, Total	0.0489		0.0100	0.00124 mg/L			10/05/22 13:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		74 - 124				10/05/22 13:39	1
Dibromofluoromethane (Surr)	98		75 - 131				10/05/22 13:39	1
1,2-Dichloroethane-d4 (Surr)	102		63 - 144				10/05/22 13:39	1
Toluene-d8 (Surr)	104		80 - 117				10/05/22 13:39	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.515		0.500	0.0711 mg/L			10/05/22 14:43	1
Nitrate as N	0.396		0.100	0.0391 mg/L			10/05/22 14:43	1
Chloride	200	B	0.500	0.200 mg/L			10/05/22 14:43	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/05/22 14:43	1
Fluoride	0.740		0.500	0.100 mg/L			10/05/22 14:43	1
Sulfate	45.0		0.500	0.109 mg/L			10/05/22 14:43	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	242		10.0	5.76 mg/L		10/06/22 09:45	10/06/22 16:33	50
Magnesium	50.2		0.200	0.0428 mg/L		10/06/22 09:45	10/06/22 16:15	1
Potassium	4.07		0.500	0.0914 mg/L		10/06/22 09:45	10/06/22 16:15	1
Sodium	78.2		0.500	0.152 mg/L		10/06/22 09:45	10/06/22 16:15	1
SiO2	71.0		1.07	0.471 mg/L		10/06/22 09:45	10/06/22 16:15	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	4.21			%			10/10/22 13:14	1
Alkalinity (SM 2320B)	456		4.00	4.00 mg/L			10/06/22 15:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	456		4.00	4.00 mg/L			10/06/22 15:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/06/22 15:41	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/06/22 15:41	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/06/22 15:41	1
Total Dissolved Solids (SM 2540C)	706		10.0	10.0 mg/L			10/06/22 17:25	1
pH (SM 4500 H+ B)	6.6	HF		SU			10/06/22 12:44	1
Temperature (SM 4500 H+ B)	17.5	HF		Degrees C			10/06/22 12:44	1

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Surrogate Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
820-5997-D-1 MS	Matrix Spike	95	99	100	98
880-19956-1	Levey Well	95	98	102	104
LCS 860-71899/3	Lab Control Sample	94	99	98	100
LCSD 860-71899/4	Lab Control Sample Dup	95	100	100	99
MB 860-71899/8	Method Blank	93	99	104	101
Surrogate Legend					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
DCA = 1,2-Dichloroethane-d4 (Surr)					
TOL = Toluene-d8 (Surr)					

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-71899/8

Matrix: Water

Analysis Batch: 71899

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/05/22 09:13	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/05/22 09:13	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/05/22 09:13	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/05/22 09:13	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/05/22 09:13	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/05/22 09:13	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/05/22 09:13	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/05/22 09:13	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/05/22 09:13	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/05/22 09:13	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/05/22 09:13	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/05/22 09:13	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/05/22 09:13	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/05/22 09:13	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/05/22 09:13	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/05/22 09:13	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/05/22 09:13	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/05/22 09:13	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/05/22 09:13	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/05/22 09:13	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/05/22 09:13	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/05/22 09:13	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/05/22 09:13	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/05/22 09:13	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/05/22 09:13	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/05/22 09:13	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/05/22 09:13	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/05/22 09:13	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/05/22 09:13	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/05/22 09:13	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/05/22 09:13	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/05/22 09:13	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/05/22 09:13	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/05/22 09:13	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/05/22 09:13	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/05/22 09:13	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/05/22 09:13	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/05/22 09:13	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/05/22 09:13	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/05/22 09:13	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/05/22 09:13	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/05/22 09:13	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/05/22 09:13	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/05/22 09:13	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/05/22 09:13	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/05/22 09:13	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/05/22 09:13	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/05/22 09:13	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-71899/8

Matrix: Water

Analysis Batch: 71899

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/05/22 09:13	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/05/22 09:13	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/05/22 09:13	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/05/22 09:13	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/05/22 09:13	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/05/22 09:13	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/05/22 09:13	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/05/22 09:13	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/05/22 09:13	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/05/22 09:13	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/05/22 09:13	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/05/22 09:13	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/05/22 09:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		74 - 124		10/05/22 09:13	1
Dibromofluoromethane (Surr)	99		75 - 131		10/05/22 09:13	1
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		10/05/22 09:13	1
Toluene-d8 (Surr)	101		80 - 117		10/05/22 09:13	1

Lab Sample ID: LCS 860-71899/3

Matrix: Water

Analysis Batch: 71899

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05392		mg/L		108	75 - 125
Bromobenzene	0.0500	0.05098		mg/L		102	75 - 125
Bromochloromethane	0.0500	0.05202		mg/L		104	60 - 140
Bromodichloromethane	0.0500	0.05554		mg/L		111	75 - 125
Bromoform	0.0500	0.05320		mg/L		106	70 - 130
Bromomethane	0.0500	0.05614		mg/L		112	60 - 140
2-Butanone	0.250	0.2083		mg/L		83	60 - 140
Carbon tetrachloride	0.0500	0.05646		mg/L		113	70 - 130
Chlorobenzene	0.0500	0.05437		mg/L		109	65 - 135
Chloroethane	0.0500	0.06060		mg/L		121	60 - 140
Chloroform	0.0500	0.05482		mg/L		110	70 - 121
Chloromethane	0.0500	0.04377		mg/L		88	60 - 140
2-Chlorotoluene	0.0500	0.05095		mg/L		102	73 - 125
4-Chlorotoluene	0.0500	0.05220		mg/L		104	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05230		mg/L		105	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05449		mg/L		109	74 - 125
Dibromochloromethane	0.0500	0.05431		mg/L		109	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04647		mg/L		93	59 - 125
1,2-Dibromoethane	0.0500	0.05150		mg/L		103	73 - 125
1,2-Dichlorobenzene	0.0500	0.05135		mg/L		103	75 - 125
1,3-Dichlorobenzene	0.0500	0.05135		mg/L		103	75 - 125
1,4-Dichlorobenzene	0.0500	0.05109		mg/L		102	75 - 125
Dichlorodifluoromethane	0.0500	0.04347		mg/L		87	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-71899/3

Matrix: Water

Analysis Batch: 71899

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.05348		mg/L		107	70 - 130
1,2-Dichloroethane	0.0500	0.05254		mg/L		105	72 - 130
1,1-Dichloroethene	0.0500	0.05492		mg/L		110	50 - 150
1,2-Dichloropropane	0.0500	0.05297		mg/L		106	74 - 125
1,3-Dichloropropane	0.0500	0.05096		mg/L		102	75 - 125
2,2-Dichloropropane	0.0500	0.05650		mg/L		113	75 - 125
1,1-Dichloropropene	0.0500	0.05343		mg/L		107	75 - 125
Ethylbenzene	0.0500	0.05617		mg/L		112	75 - 125
Hexachlorobutadiene	0.0500	0.04781		mg/L		96	75 - 125
Isopropylbenzene	0.0500	0.05818		mg/L		116	75 - 125
Methylene Chloride	0.0500	0.04765		mg/L		95	75 - 125
m,p-Xylenes	0.0500	0.05643		mg/L		113	75 - 125
MTBE	0.0500	0.05102		mg/L		102	65 - 135
Naphthalene	0.0500	0.05322		mg/L		106	70 - 130
n-Butylbenzene	0.0500	0.05264		mg/L		105	75 - 125
N-Propylbenzene	0.0500	0.05330		mg/L		107	75 - 125
o-Xylene	0.0500	0.05579		mg/L		112	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05574		mg/L		111	75 - 125
sec-Butylbenzene	0.0500	0.05399		mg/L		108	75 - 125
Styrene	0.0500	0.05613		mg/L		112	75 - 125
tert-Butylbenzene	0.0500	0.05342		mg/L		107	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05561		mg/L		111	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04731		mg/L		95	74 - 125
Tetrachloroethene	0.0500	0.05879		mg/L		118	71 - 125
Toluene	0.0500	0.05445		mg/L		109	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05643		mg/L		113	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05384		mg/L		108	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05523		mg/L		110	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04990		mg/L		100	75 - 135
1,1,1-Trichloroethane	0.0500	0.05556		mg/L		111	70 - 130
1,1,2-Trichloroethane	0.0500	0.05167		mg/L		103	70 - 130
Trichloroethene	0.0500	0.05643		mg/L		113	75 - 135
Trichlorofluoromethane	0.0500	0.06777		mg/L		136	60 - 140
1,2,3-Trichloropropane	0.0500	0.04500		mg/L		90	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05410		mg/L		108	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05349		mg/L		107	60 - 140
Vinyl chloride	0.0500	0.05512		mg/L		110	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
Toluene-d8 (Surr)	100		80 - 117

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-71899/4

Matrix: Water

Analysis Batch: 71899

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.05503		mg/L		110	75 - 125	2	25
Bromobenzene	0.0500	0.05222		mg/L		104	75 - 125	2	25
Bromochloromethane	0.0500	0.05258		mg/L		105	60 - 140	1	25
Bromodichloromethane	0.0500	0.05584		mg/L		112	75 - 125	1	25
Bromoform	0.0500	0.05354		mg/L		107	70 - 130	1	25
Bromomethane	0.0500	0.05860		mg/L		117	60 - 140	4	25
2-Butanone	0.250	0.2084		mg/L		83	60 - 140	0	25
Carbon tetrachloride	0.0500	0.05955		mg/L		119	70 - 130	5	25
Chlorobenzene	0.0500	0.05517		mg/L		110	65 - 135	1	25
Chloroethane	0.0500	0.06279		mg/L		126	60 - 140	4	25
Chloroform	0.0500	0.05580		mg/L		112	70 - 121	2	25
Chloromethane	0.0500	0.04475		mg/L		89	60 - 140	2	25
2-Chlorotoluene	0.0500	0.05299		mg/L		106	73 - 125	4	25
4-Chlorotoluene	0.0500	0.05475		mg/L		109	74 - 125	5	25
cis-1,2-Dichloroethene	0.0500	0.05267		mg/L		105	75 - 125	1	25
cis-1,3-Dichloropropene	0.0500	0.05482		mg/L		110	74 - 125	1	25
Dibromochloromethane	0.0500	0.05445		mg/L		109	73 - 125	0	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04739		mg/L		95	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.05105		mg/L		102	73 - 125	1	25
1,2-Dichlorobenzene	0.0500	0.05271		mg/L		105	75 - 125	3	25
1,3-Dichlorobenzene	0.0500	0.05259		mg/L		105	75 - 125	2	25
1,4-Dichlorobenzene	0.0500	0.05228		mg/L		105	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.04646		mg/L		93	70 - 130	7	25
1,1-Dichloroethane	0.0500	0.05493		mg/L		110	70 - 130	3	25
1,2-Dichloroethane	0.0500	0.05363		mg/L		107	72 - 130	2	25
1,1-Dichloroethene	0.0500	0.05766		mg/L		115	50 - 150	5	25
1,2-Dichloropropane	0.0500	0.05399		mg/L		108	74 - 125	2	25
1,3-Dichloropropane	0.0500	0.05079		mg/L		102	75 - 125	0	25
2,2-Dichloropropane	0.0500	0.05869		mg/L		117	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.05650		mg/L		113	75 - 125	6	25
Ethylbenzene	0.0500	0.05868		mg/L		117	75 - 125	4	25
Hexachlorobutadiene	0.0500	0.05383		mg/L		108	75 - 125	12	25
Isopropylbenzene	0.0500	0.06090		mg/L		122	75 - 125	5	25
Methylene Chloride	0.0500	0.04854		mg/L		97	75 - 125	2	25
m,p-Xylenes	0.0500	0.05874		mg/L		117	75 - 125	4	25
MTBE	0.0500	0.05261		mg/L		105	65 - 135	3	25
Naphthalene	0.0500	0.05704		mg/L		114	70 - 130	7	25
n-Butylbenzene	0.0500	0.05749		mg/L		115	75 - 125	9	25
N-Propylbenzene	0.0500	0.05607		mg/L		112	75 - 125	5	25
o-Xylene	0.0500	0.05712		mg/L		114	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05882		mg/L		118	75 - 125	5	25
sec-Butylbenzene	0.0500	0.05827		mg/L		117	75 - 125	8	25
Styrene	0.0500	0.05681		mg/L		114	75 - 125	1	25
tert-Butylbenzene	0.0500	0.05699		mg/L		114	75 - 125	6	25
1,1,1,2-Tetrachloroethane	0.0500	0.05624		mg/L		112	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.04672		mg/L		93	74 - 125	1	25
Tetrachloroethene	0.0500	0.06216		mg/L		124	71 - 125	6	25
Toluene	0.0500	0.05658		mg/L		113	70 - 130	4	25

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-71899/4

Matrix: Water

Analysis Batch: 71899

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.0500	0.05887		mg/L		118	75 - 125	4	25
trans-1,3-Dichloropropene	0.0500	0.05457		mg/L		109	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.06074		mg/L		121	75 - 137	9	25
1,2,4-Trichlorobenzene	0.0500	0.05294		mg/L		106	75 - 135	6	25
1,1,1-Trichloroethane	0.0500	0.05735		mg/L		115	70 - 130	3	25
1,1,2-Trichloroethane	0.0500	0.05177		mg/L		104	70 - 130	0	25
Trichloroethene	0.0500	0.05984		mg/L		120	75 - 135	6	25
Trichlorofluoromethane	0.0500	0.07163	*+	mg/L		143	60 - 140	6	25
1,2,3-Trichloropropane	0.0500	0.04591		mg/L		92	75 - 125	2	25
1,2,4-Trimethylbenzene	0.0500	0.05639		mg/L		113	75 - 125	4	25
1,3,5-Trimethylbenzene	0.0500	0.05644		mg/L		113	60 - 140	5	25
Vinyl chloride	0.0500	0.05793		mg/L		116	60 - 140	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	95		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
Toluene-d8 (Surr)	99		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-72008/3

Matrix: Water

Analysis Batch: 72008

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.0711	U	0.500	0.0711 mg/L			10/05/22 11:17	1
Chloride	0.2071	J	0.500	0.200 mg/L			10/05/22 11:17	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/05/22 11:17	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/05/22 11:17	1

Lab Sample ID: LCS 860-72008/4

Matrix: Water

Analysis Batch: 72008

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	10.0	9.156		mg/L		92	90 - 110
Chloride	10.0	9.542		mg/L		95	90 - 110
Fluoride	10.0	10.16		mg/L		102	90 - 110
Sulfate	10.0	10.03		mg/L		100	90 - 110

Lab Sample ID: LCSD 860-72008/5

Matrix: Water

Analysis Batch: 72008

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	10.0	9.156		mg/L		92	90 - 110	0	20
Chloride	10.0	9.574		mg/L		96	90 - 110	0	20
Fluoride	10.0	10.14		mg/L		101	90 - 110	0	20

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-72008/5

Matrix: Water

Analysis Batch: 72008

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	10.34		mg/L		103	90 - 110	3	20

Lab Sample ID: LLCS 860-72008/7

Matrix: Water

Analysis Batch: 72008

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide	0.500	0.5564		mg/L		111	50 - 150		
Chloride	0.500	0.5387		mg/L		108	50 - 150		
Fluoride	0.500	0.4563	J	mg/L		91	50 - 150		
Sulfate	0.500	0.4783	J	mg/L		96	50 - 150		

Lab Sample ID: MB 860-72009/3

Matrix: Water

Analysis Batch: 72009

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	mg/L			10/05/22 11:17	1
Nitrite as N	0.03063	J	0.100	mg/L			10/05/22 11:17	1

Lab Sample ID: LCS 860-72009/4

Matrix: Water

Analysis Batch: 72009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	10.0	9.409		mg/L		94	80 - 120		
Nitrite as N	5.00	4.726		mg/L		95	80 - 120		

Lab Sample ID: LCSD 860-72009/5

Matrix: Water

Analysis Batch: 72009

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	9.422		mg/L		94	80 - 120	0	20
Nitrite as N	5.00	4.699		mg/L		94	80 - 120	1	20

Lab Sample ID: LLCS 860-72009/6

Matrix: Water

Analysis Batch: 72009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	0.100	0.1200		mg/L		120	50 - 150		
Nitrite as N	0.100	0.09249	J	mg/L		92	50 - 150		

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-72138/1-A

Matrix: Water

Analysis Batch: 72231

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 72138

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		10/06/22 09:45	10/06/22 15:52	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		10/06/22 09:45	10/06/22 15:52	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		10/06/22 09:45	10/06/22 15:52	1
Sodium	<0.152	U	0.500	0.152 mg/L		10/06/22 09:45	10/06/22 15:52	1
SiO2	<0.471	U	1.07	0.471 mg/L		10/06/22 09:45	10/06/22 15:52	1

Lab Sample ID: LCS 860-72138/2-A

Matrix: Water

Analysis Batch: 72231

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 72138

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	26.00		mg/L		104	85 - 115
Magnesium	25.0	26.30		mg/L		105	85 - 115
Potassium	10.0	10.40		mg/L		104	85 - 115
Sodium	25.0	26.20		mg/L		105	85 - 115
SiO2	21.4	23.33		mg/L		109	85 - 115

Lab Sample ID: LCSD 860-72138/3-A

Matrix: Water

Analysis Batch: 72231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 72138

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	26.00		mg/L		104	85 - 115	0	20
Magnesium	25.0	26.30		mg/L		105	85 - 115	0	20
Potassium	10.0	10.40		mg/L		104	85 - 115	0	20
Sodium	25.0	26.20		mg/L		105	85 - 115	0	20
SiO2	21.4	23.54		mg/L		110	85 - 115	1	20

Lab Sample ID: LLCS 860-72138/4-A

Matrix: Water

Analysis Batch: 72231

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 72138

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.200	0.2480		mg/L		124	50 - 150
Magnesium	0.200	0.2160		mg/L		108	50 - 150
Potassium	0.500	0.5370		mg/L		107	50 - 150
Sodium	0.500	0.7190		mg/L		144	50 - 150
SiO2	1.07	1.046	J	mg/L		98	50 - 150

Lab Sample ID: 880-19956-1 MS

Matrix: Water

Analysis Batch: 72231

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 72138

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	50.2		25.0	74.70		mg/L		98	70 - 130
Potassium	4.07		10.0	14.90		mg/L		108	70 - 130
Sodium	78.2		25.0	102.0		mg/L		95	70 - 130
SiO2	71.0		21.4	94.16		mg/L		108	70 - 130

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 880-19956-1 MSD

Matrix: Water

Analysis Batch: 72231

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 72138

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Magnesium	50.2		25.0	74.40		mg/L		97	70 - 130	0	20
Potassium	4.07		10.0	14.80		mg/L		107	70 - 130	1	20
Sodium	78.2		25.0	101.0		mg/L		91	70 - 130	1	20
SiO2	71.0		21.4	94.59		mg/L		110	70 - 130	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-72221/4

Matrix: Water

Analysis Batch: 72221

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Alkalinity	<4.00	U	4.00	4.00 mg/L			10/06/22 11:48	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/06/22 11:48	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/06/22 11:48	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			10/06/22 11:48	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			10/06/22 11:48	1

Lab Sample ID: LCS 860-72221/5

Matrix: Water

Analysis Batch: 72221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
							Limits
Alkalinity	250	247.2		mg/L		99	85 - 115

Lab Sample ID: LCSD 860-72221/6

Matrix: Water

Analysis Batch: 72221

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
							Limits		
Alkalinity	250	248.8		mg/L		100	85 - 115	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-72262/1

Matrix: Water

Analysis Batch: 72262

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Total Dissolved Solids	<5.00	U	5.00	5.00 mg/L			10/06/22 17:25	1

Lab Sample ID: LCS 860-72262/2

Matrix: Water

Analysis Batch: 72262

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
							Limits
Total Dissolved Solids	1000	996.0		mg/L		100	80 - 120

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 860-72262/3				Client Sample ID: Lab Control Sample Dup							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 72262											
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Total Dissolved Solids	1000	991.0		mg/L		99	80 - 120	1	10		

Lab Sample ID: LCSS 860-72262/4				Client Sample ID: Lab Control Sample							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 72262											
Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits				
Total Dissolved Solids	5.00	<5.00	U	mg/L		70					

QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 71899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total/NA	Water	8260C	
MB 860-71899/8	Method Blank	Total/NA	Water	8260C	
LCS 860-71899/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-71899/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 72008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total/NA	Water	300.0	
MB 860-72008/3	Method Blank	Total/NA	Water	300.0	
LCS 860-72008/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-72008/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-72008/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 72009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total/NA	Water	300.0	
MB 860-72009/3	Method Blank	Total/NA	Water	300.0	
LCS 860-72009/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-72009/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-72009/6	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 72138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-72138/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-72138/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-72138/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-72138/4-A	Lab Control Sample	Total Recoverable	Water	200.7	
880-19956-1 MS	Levey Well	Total Recoverable	Water	200.7	
880-19956-1 MSD	Levey Well	Total Recoverable	Water	200.7	

Analysis Batch: 72231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	72138
880-19956-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	72138
MB 860-72138/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	72138
LCS 860-72138/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	72138
LCSD 860-72138/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	72138
LLCS 860-72138/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	72138
880-19956-1 MS	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	72138
880-19956-1 MSD	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	72138

General Chemistry

Analysis Batch: 72182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

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QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 72221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-72221/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-72221/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-72221/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 72262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-72262/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-72262/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-72262/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LCSS 860-72262/4	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 72566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19956-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-19956-1

Date Collected: 10/04/22 11:45

Matrix: Water

Date Received: 10/04/22 15:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	71899	NA	EET HOU	10/05/22 13:39
Total/NA	Analysis	300.0		1	72008	W1N	EET HOU	10/05/22 14:43
Total/NA	Analysis	300.0		1	72009	W1N	EET HOU	10/05/22 14:43
Total Recoverable	Prep	200.7			72138	MD	EET HOU	10/06/22 09:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	72231	JDM	EET HOU	10/06/22 16:15
Total Recoverable	Prep	200.7			72138	MD	EET HOU	10/06/22 09:45
Total Recoverable	Analysis	200.7 Rev 4.4		50	72231	JDM	EET HOU	10/06/22 16:33
Total/NA	Analysis	SM 1030E		1	72566	AA	EET HOU	10/10/22 13:14
Total/NA	Analysis	SM 2320B		1	72221	TL	EET HOU	10/06/22 15:41
Total/NA	Analysis	SM 2540C		1	72262	BSR	EET HOU	10/06/22 17:25
Total/NA	Analysis	SM 4500 H+ B		1	72182	TL	EET HOU	10/06/22 12:44

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-47	06-30-23

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
200.7 Rev 4.4	200.7	Water	SiO2
SM 1030E		Water	Anion/Cation Balance
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity
SM 2320B		Water	Phenolphthalein Alkalinity
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	MCAWW	EET HOU
200.7 Rev 4.4	Metals (ICP)	EPA	EET HOU
SM 1030E	Cation Anion Balance	SM	EET HOU
SM 2320B	Alkalinity	SM	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
200.7	Preparation, Total Recoverable Metals	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-19956-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-19956-1	Levey Well	Water	10/04/22 11:45	10/04/22 15:47

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Chain of Custody

Work Order No: 19956

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Hobbs NM (575-992-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Project Manager:	Beaux Jennings	Bill to (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	601 Marenfeld #400	Address:	
City, State ZIP:	Midland TX 79701	City, State ZIP:	
Phone:	432-230-3344	Email:	bjennings@ensolum.com

Project Name:		Levey Well	Hobbs NM	Turn Around	
Project Number:		03B1417001		Routine ☐	
P.O. Number:		03B1417001		Rush 24 Hr	
Sampler's Name:		Shane Diller		Due Date:	

SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☐ No ☒
Temperature (°C):		11.43		Thermometer ID:	100
Received Intact:		Yes ☒ No ☐		Correction Factor:	.20
Cooler Custody Seals:		Yes ☐ No ☒ N/A		Total Containers:	
Sample Custody Seals:		Yes ☐ No ☒			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	VOCs	Anions: F, Cl, SO4, B	Cations: Ca, K, Mg, Na, Si	pH	Alkalinity	TDS	Sample Comments
Levey Well	GW	10-4-22	1145	-	7	X	X	X	X	X	X	24 Hr



880-19956 Chain of Custody

TAT starts the day received by the lab, if received by 4:30pm

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/4/22			2
		1547			4
					6

Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record



**Environment Testing
America**

[illegible]

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-19956-1

SDG Number: Hobbs NM

Login Number: 19956

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-19956-1

SDG Number: Hobbs NM

Login Number: 19956

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Houston

List Creation: 10/05/22 11:26 AM

Question	Answer	Comment
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-20400-1

Laboratory Sample Delivery Group: Hobbs NM

Client Project/Site: Levey Well Hobbs, NM - 03B1417001

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/21/2022 8:02:18 AM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Laboratory Job ID: 880-20400-1
SDG: Hobbs NM

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Definitions/Glossary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

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

Eurofins Midland

Case Narrative

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Job ID: 880-20400-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-20400-1****Receipt**

The sample was received on 10/14/2022 1:38 PM. 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 3.8°C

GC/MS VOA

Method 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 860-73405 recovered outside control limits for the following analyte(s): Dichloro difluoromethane. Dichloro difluoromethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified. Note, The continuing calibration verification was within control limits. And the associated samples were not detected (ND).

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-73405 were outside control limits. Sample matrix interference is suspected.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-73667 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFM_28D: Due to the high concentration of Chloride and Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 860-73667 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-73945 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFMS: The following sample(s) was received outside of holding time.

Method 300_ORGFMS: The following sample was analyzed outside of analytical holding time: Levey Well (880-20400-1).

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

Metals

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

General Chemistry

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

Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-20400-1

Date Collected: 10/14/22 09:40

Matrix: Water

Date Received: 10/14/22 13:38

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00314		0.00100	0.000533 mg/L			10/17/22 15:13	1
Bromobenzene	<0.000665 U		0.00100	0.000665 mg/L			10/17/22 15:13	1
Bromochloromethane	<0.000657 U		0.00100	0.000657 mg/L			10/17/22 15:13	1
Bromodichloromethane	<0.000552 U		0.00100	0.000552 mg/L			10/17/22 15:13	1
Bromoform	<0.000633 U		0.00500	0.000633 mg/L			10/17/22 15:13	1
Bromomethane	<0.00142 U		0.00500	0.00142 mg/L			10/17/22 15:13	1
2-Butanone	<0.00828 U		0.0500	0.00828 mg/L			10/17/22 15:13	1
Carbon tetrachloride	<0.000896 U		0.00500	0.000896 mg/L			10/17/22 15:13	1
Chlorobenzene	<0.000530 U		0.00100	0.000530 mg/L			10/17/22 15:13	1
Chloroethane	<0.00198 U		0.0100	0.00198 mg/L			10/17/22 15:13	1
Chloroform	<0.000643 U		0.00100	0.000643 mg/L			10/17/22 15:13	1
Chloromethane	<0.00204 U		0.0100	0.00204 mg/L			10/17/22 15:13	1
2-Chlorotoluene	<0.00118 U		0.00200	0.00118 mg/L			10/17/22 15:13	1
4-Chlorotoluene	<0.000472 U		0.00100	0.000472 mg/L			10/17/22 15:13	1
cis-1,2-Dichloroethene	<0.000714 U		0.00100	0.000714 mg/L			10/17/22 15:13	1
cis-1,3-Dichloropropene	<0.00107 U		0.00500	0.00107 mg/L			10/17/22 15:13	1
Dibromochloromethane	<0.000547 U		0.00500	0.000547 mg/L			10/17/22 15:13	1
1,2-Dibromo-3-Chloropropane	<0.00127 U		0.00500	0.00127 mg/L			10/17/22 15:13	1
1,2-Dibromoethane	<0.000999 U		0.00500	0.000999 mg/L			10/17/22 15:13	1
1,2-Dichlorobenzene	<0.000509 U		0.00100	0.000509 mg/L			10/17/22 15:13	1
1,3-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			10/17/22 15:13	1
1,4-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			10/17/22 15:13	1
Dichlorodifluoromethane	<0.000919 U *		0.00100	0.000919 mg/L			10/17/22 15:13	1
1,1-Dichloroethane	<0.000635 U		0.00100	0.000635 mg/L			10/17/22 15:13	1
1,2-Dichloroethane	<0.000590 U		0.00100	0.000590 mg/L			10/17/22 15:13	1
1,1-Dichloroethene	<0.000738 U		0.00100	0.000738 mg/L			10/17/22 15:13	1
1,2-Dichloropropane	<0.000667 U		0.00500	0.000667 mg/L			10/17/22 15:13	1
1,3-Dichloropropane	<0.000514 U		0.00500	0.000514 mg/L			10/17/22 15:13	1
2,2-Dichloropropane	<0.000780 U		0.00500	0.000780 mg/L			10/17/22 15:13	1
1,1-Dichloropropene	<0.00160 U		0.00500	0.00160 mg/L			10/17/22 15:13	1
Ethylbenzene	0.0105		0.00100	0.000411 mg/L			10/17/22 15:13	1
Hexachlorobutadiene	<0.00126 U		0.00500	0.00126 mg/L			10/17/22 15:13	1
Isopropylbenzene	0.00494		0.00100	0.000613 mg/L			10/17/22 15:13	1
Methylene Chloride	<0.00173 U		0.00500	0.00173 mg/L			10/17/22 15:13	1
m,p-Xylenes	0.0429		0.0100	0.00124 mg/L			10/17/22 15:13	1
MTBE	<0.00139 U		0.00500	0.00139 mg/L			10/17/22 15:13	1
Naphthalene	<0.00135 U		0.0100	0.00135 mg/L			10/17/22 15:13	1
n-Butylbenzene	<0.000644 U		0.00100	0.000644 mg/L			10/17/22 15:13	1
N-Propylbenzene	0.00233		0.00100	0.000498 mg/L			10/17/22 15:13	1
o-Xylene	0.00624		0.00100	0.000551 mg/L			10/17/22 15:13	1
p-Cymene (p-Isopropyltoluene)	<0.000919 U		0.00100	0.000919 mg/L			10/17/22 15:13	1
sec-Butylbenzene	0.000856 J		0.00100	0.000468 mg/L			10/17/22 15:13	1
Styrene	<0.000655 U		0.00100	0.000655 mg/L			10/17/22 15:13	1
tert-Butylbenzene	<0.000442 U		0.00100	0.000442 mg/L			10/17/22 15:13	1
1,1,1,2-Tetrachloroethane	<0.000644 U		0.00100	0.000644 mg/L			10/17/22 15:13	1
1,1,2,2-Tetrachloroethane	<0.000470 U		0.00100	0.000470 mg/L			10/17/22 15:13	1
Tetrachloroethene	<0.000801 U		0.00100	0.000801 mg/L			10/17/22 15:13	1
Toluene	0.0232		0.00100	0.000475 mg/L			10/17/22 15:13	1
trans-1,2-Dichloroethene	<0.000945 U		0.00100	0.000945 mg/L			10/17/22 15:13	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-20400-1

Date Collected: 10/14/22 09:40

Matrix: Water

Date Received: 10/14/22 13:38

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/17/22 15:13	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/17/22 15:13	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/17/22 15:13	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/17/22 15:13	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/17/22 15:13	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/17/22 15:13	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/17/22 15:13	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/17/22 15:13	1
1,2,4-Trimethylbenzene	0.00932		0.00100	0.000417 mg/L			10/17/22 15:13	1
1,3,5-Trimethylbenzene	0.00306		0.00100	0.000456 mg/L			10/17/22 15:13	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/17/22 15:13	1
Xylenes, Total	0.0491		0.0100	0.00124 mg/L			10/17/22 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		74 - 124		10/17/22 15:13	1
Dibromofluoromethane (Surr)	98		75 - 131		10/17/22 15:13	1
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		10/17/22 15:13	1
Toluene-d8 (Surr)	104		80 - 117		10/17/22 15:13	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.495	J	0.500	0.0711 mg/L			10/19/22 20:13	1
Nitrate as N	0.464	H	0.100	0.0391 mg/L			10/19/22 20:13	1
Chloride	212		0.500	0.200 mg/L			10/18/22 02:38	1
Nitrite as N	<0.0293	U H	0.100	0.0293 mg/L			10/18/22 02:38	1
Fluoride	0.655		0.500	0.100 mg/L			10/18/22 02:38	1
Sulfate	49.1		0.500	0.109 mg/L			10/18/22 02:38	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	208		10.0	5.76 mg/L		10/18/22 08:57	10/18/22 14:54	50
Magnesium	42.7		0.200	0.0428 mg/L		10/18/22 08:57	10/18/22 14:39	1
Potassium	3.22		0.500	0.0914 mg/L		10/18/22 08:57	10/18/22 14:39	1
Sodium	68.5		0.500	0.152 mg/L		10/18/22 08:57	10/18/22 14:39	1
SiO2	66.3		1.07	0.471 mg/L		10/18/22 08:57	10/18/22 14:39	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	-16.5			%			10/20/22 12:29	1
Alkalinity (SM 2320B)	719		4.00	4.00 mg/L			10/18/22 12:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	719		4.00	4.00 mg/L			10/18/22 12:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/18/22 12:17	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/18/22 12:17	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/18/22 12:17	1
Total Dissolved Solids (SM 2540C)	1250		10.0	10.0 mg/L			10/18/22 14:39	1
pH (SM 4500 H+ B)	6.3	HF		SU			10/18/22 12:23	1
Temperature (SM 4500 H+ B)	15.9	HF		Degrees C			10/18/22 12:23	1

Eurofins Midland

Surrogate Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS
Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
860-35064-D-1 MS	Matrix Spike	94	99	100	98
880-20400-1	Levey Well	93	98	101	104
LCS 860-73405/3	Lab Control Sample	94	101	98	98
LCSD 860-73405/4	Lab Control Sample Dup	94	98	97	98
MB 860-73405/9	Method Blank	94	103	103	100
Surrogate Legend					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
DCA = 1,2-Dichloroethane-d4 (Surr)					
TOL = Toluene-d8 (Surr)					

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-73405/9

Matrix: Water

Analysis Batch: 73405

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/17/22 09:44	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/17/22 09:44	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/17/22 09:44	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/17/22 09:44	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/17/22 09:44	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/17/22 09:44	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/17/22 09:44	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/17/22 09:44	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/17/22 09:44	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/17/22 09:44	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/17/22 09:44	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/17/22 09:44	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/17/22 09:44	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/17/22 09:44	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/17/22 09:44	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/17/22 09:44	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/17/22 09:44	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/17/22 09:44	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/17/22 09:44	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/17/22 09:44	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/17/22 09:44	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/17/22 09:44	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/17/22 09:44	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/17/22 09:44	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/17/22 09:44	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/17/22 09:44	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/17/22 09:44	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/17/22 09:44	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/17/22 09:44	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/17/22 09:44	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/17/22 09:44	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/17/22 09:44	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/17/22 09:44	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/17/22 09:44	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/17/22 09:44	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/17/22 09:44	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/17/22 09:44	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/17/22 09:44	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/17/22 09:44	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/17/22 09:44	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/17/22 09:44	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/17/22 09:44	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/17/22 09:44	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/17/22 09:44	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/17/22 09:44	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/17/22 09:44	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/17/22 09:44	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/17/22 09:44	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-73405/9

Matrix: Water

Analysis Batch: 73405

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/17/22 09:44	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/17/22 09:44	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/17/22 09:44	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/17/22 09:44	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/17/22 09:44	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/17/22 09:44	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/17/22 09:44	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/17/22 09:44	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/17/22 09:44	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/17/22 09:44	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/17/22 09:44	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/17/22 09:44	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/17/22 09:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		74 - 124		10/17/22 09:44	1
Dibromofluoromethane (Surr)	103		75 - 131		10/17/22 09:44	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		10/17/22 09:44	1
Toluene-d8 (Surr)	100		80 - 117		10/17/22 09:44	1

Lab Sample ID: LCS 860-73405/3

Matrix: Water

Analysis Batch: 73405

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04718		mg/L		94	75 - 125
Bromobenzene	0.0500	0.04850		mg/L		97	75 - 125
Bromochloromethane	0.0500	0.04957		mg/L		99	60 - 140
Bromodichloromethane	0.0500	0.04922		mg/L		98	75 - 125
Bromoform	0.0500	0.05182		mg/L		104	70 - 130
Bromomethane	0.0500	0.03417		mg/L		68	60 - 140
2-Butanone	0.250	0.2311		mg/L		92	60 - 140
Carbon tetrachloride	0.0500	0.04857		mg/L		97	70 - 130
Chlorobenzene	0.0500	0.04925		mg/L		99	65 - 135
Chloroethane	0.0500	0.04929		mg/L		99	60 - 140
Chloroform	0.0500	0.04916		mg/L		98	70 - 121
Chloromethane	0.0500	0.03464		mg/L		69	60 - 140
2-Chlorotoluene	0.0500	0.04591		mg/L		92	73 - 125
4-Chlorotoluene	0.0500	0.04678		mg/L		94	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04949		mg/L		99	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04940		mg/L		99	74 - 125
Dibromochloromethane	0.0500	0.05267		mg/L		105	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04573		mg/L		91	59 - 125
1,2-Dibromoethane	0.0500	0.04808		mg/L		96	73 - 125
1,2-Dichlorobenzene	0.0500	0.04708		mg/L		94	75 - 125
1,3-Dichlorobenzene	0.0500	0.04690		mg/L		94	75 - 125
1,4-Dichlorobenzene	0.0500	0.04688		mg/L		94	75 - 125
Dichlorodifluoromethane	0.0500	0.02761	*-	mg/L		55	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-73405/3

Matrix: Water

Analysis Batch: 73405

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.04929		mg/L		99	70 - 130
1,2-Dichloroethane	0.0500	0.04781		mg/L		96	72 - 130
1,1-Dichloroethene	0.0500	0.04789		mg/L		96	50 - 150
1,2-Dichloropropane	0.0500	0.04841		mg/L		97	74 - 125
1,3-Dichloropropane	0.0500	0.04833		mg/L		97	75 - 125
2,2-Dichloropropane	0.0500	0.04962		mg/L		99	75 - 125
1,1-Dichloropropene	0.0500	0.04769		mg/L		95	75 - 125
Ethylbenzene	0.0500	0.05156		mg/L		103	75 - 125
Hexachlorobutadiene	0.0500	0.04336		mg/L		87	75 - 125
Isopropylbenzene	0.0500	0.05048		mg/L		101	75 - 125
Methylene Chloride	0.0500	0.04269		mg/L		85	75 - 125
m,p-Xylenes	0.0500	0.04967		mg/L		99	75 - 125
MTBE	0.0500	0.05118		mg/L		102	65 - 135
Naphthalene	0.0500	0.05051		mg/L		101	70 - 130
n-Butylbenzene	0.0500	0.04729		mg/L		95	75 - 125
N-Propylbenzene	0.0500	0.04703		mg/L		94	75 - 125
o-Xylene	0.0500	0.04978		mg/L		100	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05004		mg/L		100	75 - 125
sec-Butylbenzene	0.0500	0.04781		mg/L		96	75 - 125
Styrene	0.0500	0.05027		mg/L		101	75 - 125
tert-Butylbenzene	0.0500	0.04814		mg/L		96	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05007		mg/L		100	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04830		mg/L		97	74 - 125
Tetrachloroethene	0.0500	0.05144		mg/L		103	71 - 125
Toluene	0.0500	0.04745		mg/L		95	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05111		mg/L		102	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04998		mg/L		100	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05456		mg/L		109	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04565		mg/L		91	75 - 135
1,1,1-Trichloroethane	0.0500	0.04818		mg/L		96	70 - 130
1,1,2-Trichloroethane	0.0500	0.04947		mg/L		99	70 - 130
Trichloroethene	0.0500	0.05029		mg/L		101	75 - 135
Trichlorofluoromethane	0.0500	0.05570		mg/L		111	60 - 140
1,2,3-Trichloropropane	0.0500	0.04275		mg/L		85	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04849		mg/L		97	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04743		mg/L		95	60 - 140
Vinyl chloride	0.0500	0.04335		mg/L		87	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
Toluene-d8 (Surr)	98		80 - 117

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-73405/4

Matrix: Water

Analysis Batch: 73405

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.04876		mg/L		98	75 - 125	3	25
Bromobenzene	0.0500	0.04779		mg/L		96	75 - 125	1	25
Bromochloromethane	0.0500	0.04783		mg/L		96	60 - 140	4	25
Bromodichloromethane	0.0500	0.05058		mg/L		101	75 - 125	3	25
Bromoform	0.0500	0.05006		mg/L		100	70 - 130	3	25
Bromomethane	0.0500	0.04048		mg/L		81	60 - 140	17	25
2-Butanone	0.250	0.2101		mg/L		84	60 - 140	10	25
Carbon tetrachloride	0.0500	0.05038		mg/L		101	70 - 130	4	25
Chlorobenzene	0.0500	0.04909		mg/L		98	65 - 135	0	25
Chloroethane	0.0500	0.05104		mg/L		102	60 - 140	3	25
Chloroform	0.0500	0.04869		mg/L		97	70 - 121	1	25
Chloromethane	0.0500	0.03479		mg/L		70	60 - 140	0	25
2-Chlorotoluene	0.0500	0.04761		mg/L		95	73 - 125	4	25
4-Chlorotoluene	0.0500	0.04870		mg/L		97	74 - 125	4	25
cis-1,2-Dichloroethene	0.0500	0.04707		mg/L		94	75 - 125	5	25
cis-1,3-Dichloropropene	0.0500	0.04963		mg/L		99	74 - 125	0	25
Dibromochloromethane	0.0500	0.05020		mg/L		100	73 - 125	5	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04524		mg/L		90	59 - 125	1	25
1,2-Dibromoethane	0.0500	0.04769		mg/L		95	73 - 125	1	25
1,2-Dichlorobenzene	0.0500	0.04775		mg/L		95	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.04755		mg/L		95	75 - 125	1	25
1,4-Dichlorobenzene	0.0500	0.04708		mg/L		94	75 - 125	0	25
Dichlorodifluoromethane	0.0500	0.02926	*	mg/L		59	70 - 130	6	25
1,1-Dichloroethane	0.0500	0.05132		mg/L		103	70 - 130	4	25
1,2-Dichloroethane	0.0500	0.04864		mg/L		97	72 - 130	2	25
1,1-Dichloroethene	0.0500	0.05113		mg/L		102	50 - 150	7	25
1,2-Dichloropropane	0.0500	0.04857		mg/L		97	74 - 125	0	25
1,3-Dichloropropane	0.0500	0.04780		mg/L		96	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.05058		mg/L		101	75 - 125	2	25
1,1-Dichloropropene	0.0500	0.04808		mg/L		96	75 - 125	1	25
Ethylbenzene	0.0500	0.05154		mg/L		103	75 - 125	0	25
Hexachlorobutadiene	0.0500	0.04824		mg/L		96	75 - 125	11	25
Isopropylbenzene	0.0500	0.05195		mg/L		104	75 - 125	3	25
Methylene Chloride	0.0500	0.04468		mg/L		89	75 - 125	5	25
m,p-Xylenes	0.0500	0.05024		mg/L		100	75 - 125	1	25
MTBE	0.0500	0.05010		mg/L		100	65 - 135	2	25
Naphthalene	0.0500	0.05339		mg/L		107	70 - 130	6	25
n-Butylbenzene	0.0500	0.05085		mg/L		102	75 - 125	7	25
N-Propylbenzene	0.0500	0.04961		mg/L		99	75 - 125	5	25
o-Xylene	0.0500	0.05077		mg/L		102	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05330		mg/L		107	75 - 125	6	25
sec-Butylbenzene	0.0500	0.05142		mg/L		103	75 - 125	7	25
Styrene	0.0500	0.05108		mg/L		102	75 - 125	2	25
tert-Butylbenzene	0.0500	0.05084		mg/L		102	75 - 125	5	25
1,1,1,2-Tetrachloroethane	0.0500	0.04934		mg/L		99	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.04616		mg/L		92	74 - 125	5	25
Tetrachloroethene	0.0500	0.05256		mg/L		105	71 - 125	2	25
Toluene	0.0500	0.04838		mg/L		97	70 - 130	2	25

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-73405/4

Matrix: Water

Analysis Batch: 73405

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.0500	0.05161		mg/L		103	75 - 125	1	25
trans-1,3-Dichloropropene	0.0500	0.04914		mg/L		98	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.05468		mg/L		109	75 - 137	0	25
1,2,4-Trichlorobenzene	0.0500	0.04924		mg/L		98	75 - 135	8	25
1,1,1-Trichloroethane	0.0500	0.05025		mg/L		100	70 - 130	4	25
1,1,2-Trichloroethane	0.0500	0.04838		mg/L		97	70 - 130	2	25
Trichloroethene	0.0500	0.05056		mg/L		101	75 - 135	1	25
Trichlorofluoromethane	0.0500	0.05870		mg/L		117	60 - 140	5	25
1,2,3-Trichloropropane	0.0500	0.04655		mg/L		93	75 - 125	9	25
1,2,4-Trimethylbenzene	0.0500	0.05018		mg/L		100	75 - 125	3	25
1,3,5-Trimethylbenzene	0.0500	0.04978		mg/L		100	60 - 140	5	25
Vinyl chloride	0.0500	0.04650		mg/L		93	60 - 140	7	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	97		63 - 144
Toluene-d8 (Surr)	98		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-73667/3

Matrix: Water

Analysis Batch: 73667

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.0711	U	0.500	0.0711 mg/L			10/17/22 21:32	1
Chloride	<0.200	U	0.500	0.200 mg/L			10/17/22 21:32	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/17/22 21:32	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/17/22 21:32	1

Lab Sample ID: LCS 860-73667/4

Matrix: Water

Analysis Batch: 73667

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	10.0	9.785		mg/L		98	90 - 110
Chloride	10.0	10.03		mg/L		100	90 - 110
Fluoride	10.0	10.75		mg/L		107	90 - 110
Sulfate	10.0	9.807		mg/L		98	90 - 110

Lab Sample ID: LCSD 860-73667/5

Matrix: Water

Analysis Batch: 73667

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	10.0	9.790		mg/L		98	90 - 110	0	20
Chloride	10.0	10.01		mg/L		100	90 - 110	0	20
Fluoride	10.0	10.72		mg/L		107	90 - 110	0	20

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-73667/5

Matrix: Water

Analysis Batch: 73667

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	9.869		mg/L		99	90 - 110	1	20

Lab Sample ID: LLCS 860-73667/7

Matrix: Water

Analysis Batch: 73667

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide	0.500	0.5162		mg/L		103	50 - 150		
Chloride	0.500	0.4698	J	mg/L		94	50 - 150		
Fluoride	0.500	0.5179		mg/L		104	50 - 150		
Sulfate	0.500	0.5079		mg/L		102	50 - 150		

Lab Sample ID: MB 860-73668/3

Matrix: Water

Analysis Batch: 73668

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	mg/L			10/17/22 21:32	1
Nitrite as N	<0.0293	U	0.100	mg/L			10/17/22 21:32	1

Lab Sample ID: LCS 860-73668/4

Matrix: Water

Analysis Batch: 73668

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	10.0	9.853		mg/L		99	80 - 120		
Nitrite as N	5.00	4.999		mg/L		100	80 - 120		

Lab Sample ID: LCSD 860-73668/5

Matrix: Water

Analysis Batch: 73668

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	9.859		mg/L		99	80 - 120	0	20
Nitrite as N	5.00	4.995		mg/L		100	80 - 120	0	20

Lab Sample ID: LLCS 860-73668/6

Matrix: Water

Analysis Batch: 73668

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	0.100	0.1122		mg/L		112	50 - 150		
Nitrite as N	0.100	0.07636	J	mg/L		76	50 - 150		

Lab Sample ID: MB 860-73945/3

Matrix: Water

Analysis Batch: 73945

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.0711	U	0.500	mg/L			10/19/22 13:06	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-73945/3

Matrix: Water

Analysis Batch: 73945

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			10/19/22 13:06	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/19/22 13:06	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/19/22 13:06	1

Lab Sample ID: LCS 860-73945/4

Matrix: Water

Analysis Batch: 73945

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	10.0	9.405		mg/L		94	90 - 110
Chloride	10.0	9.742		mg/L		97	90 - 110
Fluoride	10.0	10.60		mg/L		106	90 - 110
Sulfate	10.0	9.657		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-73945/5

Matrix: Water

Analysis Batch: 73945

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	10.0	9.431		mg/L		94	90 - 110	0	20
Chloride	10.0	9.719		mg/L		97	90 - 110	0	20
Fluoride	10.0	10.61		mg/L		106	90 - 110	0	20
Sulfate	10.0	9.706		mg/L		97	90 - 110	1	20

Lab Sample ID: LLCS 860-73945/7

Matrix: Water

Analysis Batch: 73945

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	0.500	0.5029		mg/L		101	50 - 150
Chloride	0.500	0.4632	J	mg/L		93	50 - 150
Fluoride	0.500	0.5050		mg/L		101	50 - 150
Sulfate	0.500	0.5218		mg/L		104	50 - 150

Lab Sample ID: MB 860-73946/3

Matrix: Water

Analysis Batch: 73946

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			10/19/22 13:06	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/19/22 13:06	1

Lab Sample ID: LCS 860-73946/4

Matrix: Water

Analysis Batch: 73946

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.633		mg/L		96	80 - 120
Nitrite as N	5.00	4.827		mg/L		97	80 - 120

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-73946/5

Matrix: Water

Analysis Batch: 73946

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD
							Limits	RPD	Limit
Nitrate as N	10.0	9.617		mg/L		96	80 - 120	0	20
Nitrite as N	5.00	4.836		mg/L		97	80 - 120	0	20

Lab Sample ID: LLCS 860-73946/6

Matrix: Water

Analysis Batch: 73946

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	RPD
Nitrate as N	0.100	0.1119		mg/L		112	50 - 150	
Nitrite as N	0.100	0.07499	J	mg/L		75	50 - 150	

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-73604/1-A

Matrix: Water

Analysis Batch: 73726

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 73604

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Calcium	<0.115	U	0.200	0.115 mg/L		10/18/22 08:57	10/18/22 13:59	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		10/18/22 08:57	10/18/22 13:59	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		10/18/22 08:57	10/18/22 13:59	1
Sodium	<0.152	U	0.500	0.152 mg/L		10/18/22 08:57	10/18/22 13:59	1
SiO2	<0.471	U	1.07	0.471 mg/L		10/18/22 08:57	10/18/22 13:59	1

Lab Sample ID: LCS 860-73604/2-A

Matrix: Water

Analysis Batch: 73726

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 73604

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	RPD
Calcium	25.0	25.20		mg/L		101	85 - 115	
Magnesium	25.0	24.60		mg/L		98	85 - 115	
Potassium	10.0	9.940		mg/L		99	85 - 115	
Sodium	25.0	23.50		mg/L		94	85 - 115	
SiO2	21.4	20.57		mg/L		96	85 - 115	

Lab Sample ID: LCSD 860-73604/3-A

Matrix: Water

Analysis Batch: 73726

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 73604

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD
							Limits	RPD	Limit
Calcium	25.0	25.30		mg/L		101	85 - 115	0	20
Magnesium	25.0	24.70		mg/L		99	85 - 115	0	20
Potassium	10.0	10.00		mg/L		100	85 - 115	1	20
Sodium	25.0	23.70		mg/L		95	85 - 115	1	20
SiO2	21.4	20.72		mg/L		97	85 - 115	1	20

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-73714/4

Matrix: Water

Analysis Batch: 73714

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	4.00 mg/L			10/18/22 11:46	1
Bicarbonate Alkalinity as CaCO ₃	<4.00	U	4.00	4.00 mg/L			10/18/22 11:46	1
Carbonate Alkalinity as CaCO ₃	<4.00	U	4.00	4.00 mg/L			10/18/22 11:46	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			10/18/22 11:46	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			10/18/22 11:46	1

Lab Sample ID: LCS 860-73714/5

Matrix: Water

Analysis Batch: 73714

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	237.9		mg/L		95	85 - 115

Lab Sample ID: LCSD 860-73714/6

Matrix: Water

Analysis Batch: 73714

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	239.0		mg/L		96	85 - 115	0	20

Lab Sample ID: 880-20400-1 DU

Matrix: Water

Analysis Batch: 73714

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	719		743.0		mg/L		3	20
Bicarbonate Alkalinity as CaCO ₃	719		743.0		mg/L		3	20
Carbonate Alkalinity as CaCO ₃	<4.00	U	<4.00	U	mg/L		NC	20
Hydroxide Alkalinity	<4.00	U	<4.00	U	mg/L		NC	20
Phenolphthalein Alkalinity	<4.00	U	<4.00	U	mg/L		NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-73711/1

Matrix: Water

Analysis Batch: 73711

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.00	U	5.00	5.00 mg/L			10/18/22 14:39	1

Lab Sample ID: LCS 860-73711/2

Matrix: Water

Analysis Batch: 73711

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	989.0		mg/L		99	80 - 120

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 860-73711/3				Client Sample ID: Lab Control Sample Dup							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 73711											
				Spike	LCSD	LCSD			%Rec	RPD	
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD Limit
Total Dissolved Solids				1000	984.0		mg/L		98	80 - 120	1 10

QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 73405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	8260C	
MB 860-73405/9	Method Blank	Total/NA	Water	8260C	
LCS 860-73405/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-73405/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 73667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	300.0	
MB 860-73667/3	Method Blank	Total/NA	Water	300.0	
LCS 860-73667/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-73667/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-73667/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 73668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	300.0	
MB 860-73668/3	Method Blank	Total/NA	Water	300.0	
LCS 860-73668/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-73668/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-73668/6	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 73945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	300.0	
MB 860-73945/3	Method Blank	Total/NA	Water	300.0	
LCS 860-73945/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-73945/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-73945/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 73946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	300.0	
MB 860-73946/3	Method Blank	Total/NA	Water	300.0	
LCS 860-73946/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-73946/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-73946/6	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 73604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-73604/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-73604/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-73604/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	

Analysis Batch: 73726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	73604
880-20400-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	73604

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QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Metals (Continued)

Analysis Batch: 73726 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-73604/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	73604
LCS 860-73604/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	73604
LCSD 860-73604/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	73604

General Chemistry

Analysis Batch: 73683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 73711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-73711/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-73711/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-73711/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 73714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-73714/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-73714/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-73714/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
880-20400-1 DU	Levey Well	Total/NA	Water	SM 2320B	

Analysis Batch: 74067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20400-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-20400-1
Date Collected: 10/14/22 09:40 Matrix: Water
Date Received: 10/14/22 13:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	73405	NA	EET HOU	10/17/22 15:13
Total/NA	Analysis	300.0		1	73667	WP	EET HOU	10/18/22 02:38
Total/NA	Analysis	300.0		1	73668	WP	EET HOU	10/18/22 02:38
Total/NA	Analysis	300.0		1	73945	A1S	EET HOU	10/19/22 20:13
Total/NA	Analysis	300.0		1	73946	A1S	EET HOU	10/19/22 20:13
Total Recoverable	Prep	200.7			73604	AGR	EET HOU	10/18/22 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		1	73726	JDM	EET HOU	10/18/22 14:39
Total Recoverable	Prep	200.7			73604	AGR	EET HOU	10/18/22 08:57
Total Recoverable	Analysis	200.7 Rev 4.4		50	73726	JDM	EET HOU	10/18/22 14:54
Total/NA	Analysis	SM 1030E		1	74067	SC	EET HOU	10/20/22 12:29
Total/NA	Analysis	SM 2320B		1	73714	TL	EET HOU	10/18/22 12:17
Total/NA	Analysis	SM 2540C		1	73711	BSR	EET HOU	10/18/22 14:39
Total/NA	Analysis	SM 4500 H+ B		1	73683	TL	EET HOU	10/18/22 12:23

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-47	06-30-23

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
200.7 Rev 4.4	200.7	Water	SiO2
SM 1030E		Water	Anion/Cation Balance
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity
SM 2320B		Water	Phenolphthalein Alkalinity
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	MCAWW	EET HOU
200.7 Rev 4.4	Metals (ICP)	EPA	EET HOU
SM 1030E	Cation Anion Balance	SM	EET HOU
SM 2320B	Alkalinity	SM	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
200.7	Preparation, Total Recoverable Metals	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU

Protocol References:

- EPA = US Environmental Protection Agency
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SM = "Standard Methods For The Examination Of Water And Wastewater"
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

- EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20400-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20400-1	Levey Well	Water	10/14/22 09:40	10/14/22 13:38

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Environment Testing
America

Chain of Custody Record

Eurofins Midland
12111 W Florida Ave
Midland TX 79701
Phone: 432-704-5440

[illegible]

Ver- 06/08/2021

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20400-1

SDG Number: Hobbs NM

Login Number: 20400

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20400-1

SDG Number: Hobbs NM

Login Number: 20400

List Number: 2

Creator: Marin, Juan

List Source: Eurofins Houston

List Creation: 10/17/22 01:00 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-20548-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/24/2022 4:29:31 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Laboratory Job ID: 880-20548-1

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Definitions/Glossary

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

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

Eurofins Midland

Definitions/Glossary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Case Narrative

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

Job ID: 880-20548-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-20548-1****Receipt**

The samples were received on 10/19/2022 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.3°C

GC/MS VOA

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-73963 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 860-74282 were outside control limits: (870-11728-C-11 MS) and (870-11728-C-11 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 300_ORGFMS: The method blank contained Nitrate as N above the method detection limit (MDL) . Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-74155 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

General Chemistry

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

Client Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20548-1

Date Collected: 10/19/22 12:25

Matrix: Water

Date Received: 10/19/22 16:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/21/22 01:28	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/21/22 01:28	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/21/22 01:28	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/21/22 01:28	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/21/22 01:28	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/21/22 01:28	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/21/22 01:28	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/21/22 01:28	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/21/22 01:28	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/21/22 01:28	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/21/22 01:28	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/21/22 01:28	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/21/22 01:28	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/21/22 01:28	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/21/22 01:28	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/21/22 01:28	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/21/22 01:28	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/21/22 01:28	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/21/22 01:28	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/21/22 01:28	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/21/22 01:28	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/21/22 01:28	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/21/22 01:28	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/21/22 01:28	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/21/22 01:28	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/21/22 01:28	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/21/22 01:28	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/21/22 01:28	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/21/22 01:28	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/21/22 01:28	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/21/22 01:28	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/21/22 01:28	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/21/22 01:28	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/21/22 01:28	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/21/22 01:28	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/21/22 01:28	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/21/22 01:28	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/21/22 01:28	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/21/22 01:28	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/21/22 01:28	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/21/22 01:28	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/21/22 01:28	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/21/22 01:28	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/21/22 01:28	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/21/22 01:28	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/21/22 01:28	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/21/22 01:28	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/21/22 01:28	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/21/22 01:28	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20548-1

Date Collected: 10/19/22 12:25

Matrix: Water

Date Received: 10/19/22 16:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/21/22 01:28	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/21/22 01:28	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/21/22 01:28	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/21/22 01:28	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/21/22 01:28	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/21/22 01:28	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/21/22 01:28	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/21/22 01:28	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/21/22 01:28	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/21/22 01:28	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/21/22 01:28	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/21/22 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		74 - 124		10/21/22 01:28	1
Dibromofluoromethane (Surr)	102		75 - 131		10/21/22 01:28	1
1,2-Dichloroethane-d4 (Surr)	110		63 - 144		10/21/22 01:28	1
Toluene-d8 (Surr)	104		80 - 117		10/21/22 01:28	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.981	U	4.97	0.981 mg/L			10/21/22 16:36	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.981	U	4.97	0.981 mg/L		10/21/22 12:06	10/21/22 15:11	1
Diesel Range Organics (Over C10-C28)	<0.981	U	4.97	0.981 mg/L		10/21/22 12:06	10/21/22 15:11	1
Oil Range Organics (Over C28-C36)	<0.947	U	4.97	0.947 mg/L		10/21/22 12:06	10/21/22 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 135	10/21/22 12:06	10/21/22 15:11	1
o-Terphenyl	105		70 - 135	10/21/22 12:06	10/21/22 15:11	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		0.500	0.200 mg/L			10/21/22 02:08	1
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			10/21/22 02:08	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/21/22 02:08	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/21/22 02:08	1
Sulfate	19.2		0.500	0.109 mg/L			10/21/22 02:08	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	283		4.00	4.00 mg/L			10/20/22 16:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	283		4.00	4.00 mg/L			10/20/22 16:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/20/22 16:44	1
Carbon dioxide (SM 4500 CO2 D)	271			mg/L			10/24/22 13:30	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20548-1

Date Collected: 10/19/22 12:25

Matrix: Water

Date Received: 10/19/22 16:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide, Free (SM 4500 CO2 D)	22.4			mg/L			10/24/22 13:30	1
pH (SM 4500 H+ B)	7.4	HF		SU			10/20/22 16:20	1
Temperature (SM 4500 H+ B)	18.4	HF		Celsius			10/20/22 16:20	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495 mg/L			10/21/22 17:38	1

Client Sample ID: MW-2

Lab Sample ID: 880-20548-2

Date Collected: 10/19/22 13:25

Matrix: Water

Date Received: 10/19/22 16:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0141		0.00100	0.000533 mg/L			10/20/22 16:34	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/20/22 16:34	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/20/22 16:34	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/20/22 16:34	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/20/22 16:34	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/20/22 16:34	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/20/22 16:34	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/20/22 16:34	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/20/22 16:34	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/20/22 16:34	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/20/22 16:34	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/20/22 16:34	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/20/22 16:34	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/20/22 16:34	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/20/22 16:34	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/20/22 16:34	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/20/22 16:34	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 16:34	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/20/22 16:34	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/20/22 16:34	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 16:34	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 16:34	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 16:34	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/20/22 16:34	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/20/22 16:34	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/20/22 16:34	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/20/22 16:34	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/20/22 16:34	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/20/22 16:34	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/20/22 16:34	1
Ethylbenzene	0.0156		0.00100	0.000411 mg/L			10/20/22 16:34	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/20/22 16:34	1
Isopropylbenzene	0.00722		0.00100	0.000613 mg/L			10/20/22 16:34	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/20/22 16:34	1
m,p-Xylenes	0.0773		0.0100	0.00124 mg/L			10/20/22 16:34	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/20/22 16:34	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/20/22 16:34	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 16:34	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

Client Sample ID: MW-2

Lab Sample ID: 880-20548-2

Date Collected: 10/19/22 13:25

Matrix: Water

Date Received: 10/19/22 16:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	0.00209		0.00100	0.000498 mg/L			10/20/22 16:34	1
o-Xylene	0.00858		0.00100	0.000551 mg/L			10/20/22 16:34	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 16:34	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/20/22 16:34	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/20/22 16:34	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/20/22 16:34	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 16:34	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/20/22 16:34	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/20/22 16:34	1
Toluene	0.00301		0.00100	0.000475 mg/L			10/20/22 16:34	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/20/22 16:34	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 16:34	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/20/22 16:34	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/20/22 16:34	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/20/22 16:34	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/20/22 16:34	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/20/22 16:34	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/20/22 16:34	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/20/22 16:34	1
1,2,4-Trimethylbenzene	0.0222		0.00100	0.000417 mg/L			10/20/22 16:34	1
1,3,5-Trimethylbenzene	0.00535		0.00100	0.000456 mg/L			10/20/22 16:34	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/20/22 16:34	1
Xylenes, Total	0.0859		0.0100	0.00124 mg/L			10/20/22 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		10/20/22 16:34	1
Dibromofluoromethane (Surr)	98		75 - 131		10/20/22 16:34	1
1,2-Dichloroethane-d4 (Surr)	111		63 - 144		10/20/22 16:34	1
Toluene-d8 (Surr)	103		80 - 117		10/20/22 16:34	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.46	J	4.44	0.877 mg/L			10/21/22 16:36	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.46	J	4.44	0.877	mg/L		10/21/22 12:06	10/21/22 15:30	1
Diesel Range Organics (Over C10-C28)	<0.877	U	4.44	0.877	mg/L		10/21/22 12:06	10/21/22 15:30	1
Oil Range Organics (Over C28-C36)	<0.846	U	4.44	0.846	mg/L		10/21/22 12:06	10/21/22 15:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 135				10/21/22 12:06	10/21/22 15:30	1
o-Terphenyl	92		70 - 135				10/21/22 12:06	10/21/22 15:30	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.2	F2	0.500	0.200 mg/L			10/21/22 02:20	1
Nitrate as N	0.101	B F1 F2	0.100	0.0391 mg/L			10/21/22 02:20	1
Fluoride	<0.100	U F1	0.500	0.100 mg/L			10/21/22 02:20	1

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Client Sample Results

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

Client Sample ID: MW-2
Date Collected: 10/19/22 13:25
Date Received: 10/19/22 16:00

Lab Sample ID: 880-20548-2
Matrix: Water

Method: MCAWW 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	<0.0293	U F1	0.100	0.0293	mg/L			10/21/22 02:20	1
Sulfate	48.5	F2	0.500	0.109	mg/L			10/21/22 02:20	1
General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	1290		4.00	4.00	mg/L			10/20/22 17:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	1290		4.00	4.00	mg/L			10/20/22 17:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/20/22 17:21	1
Carbon dioxide (SM 4500 CO2 D)	1950				mg/L			10/24/22 13:30	1
Carbon Dioxide, Free (SM 4500 CO2 D)	814				mg/L			10/24/22 13:30	1
pH (SM 4500 H+ B)	6.5	HF			SU			10/20/22 16:20	1
Temperature (SM 4500 H+ B)	18.3	HF			Celsius			10/20/22 16:20	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495	mg/L			10/21/22 17:38	1

Surrogate Summary

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
860-35253-K-1 MS	Matrix Spike	101	98	103	99
860-35263-C-2 MS	Matrix Spike	99	97	106	97
880-20548-1	MW-1	103	102	110	104
880-20548-2	MW-2	102	98	111	103
LCS 860-73963/3	Lab Control Sample	99	98	106	98
LCS 860-74082/3	Lab Control Sample	100	100	104	99
LCSD 860-73963/4	Lab Control Sample Dup	99	102	103	97
LCSD 860-74082/4	Lab Control Sample Dup	101	99	106	99
MB 860-73963/9	Method Blank	98	98	104	100
MB 860-74082/9	Method Blank	99	100	108	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-135)	OTPH1 (70-135)
880-20548-1	MW-1	93	105
880-20548-2	MW-2	85	92
LCS 860-74251/2-A	Lab Control Sample	95	95
LCSD 860-74251/3-A	Lab Control Sample Dup	95	93
MB 860-74251/1-A	Method Blank	105	115

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-73963/9

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/20/22 09:44	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/20/22 09:44	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/20/22 09:44	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/20/22 09:44	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/20/22 09:44	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/20/22 09:44	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/20/22 09:44	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/20/22 09:44	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/20/22 09:44	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/20/22 09:44	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/20/22 09:44	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/20/22 09:44	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/20/22 09:44	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/20/22 09:44	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/20/22 09:44	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/20/22 09:44	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/20/22 09:44	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 09:44	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/20/22 09:44	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/20/22 09:44	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 09:44	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 09:44	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 09:44	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/20/22 09:44	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/20/22 09:44	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/20/22 09:44	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/20/22 09:44	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/20/22 09:44	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/20/22 09:44	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/20/22 09:44	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/20/22 09:44	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/20/22 09:44	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/20/22 09:44	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/20/22 09:44	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/20/22 09:44	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/20/22 09:44	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/20/22 09:44	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 09:44	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/20/22 09:44	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/20/22 09:44	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 09:44	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/20/22 09:44	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/20/22 09:44	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/20/22 09:44	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 09:44	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/20/22 09:44	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/20/22 09:44	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/20/22 09:44	1

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-73963/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 73963

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/20/22 09:44	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 09:44	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/20/22 09:44	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/20/22 09:44	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/20/22 09:44	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/20/22 09:44	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/20/22 09:44	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/20/22 09:44	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/20/22 09:44	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/20/22 09:44	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/20/22 09:44	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/20/22 09:44	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/20/22 09:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		10/20/22 09:44	1
Dibromofluoromethane (Surr)	98		75 - 131		10/20/22 09:44	1
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		10/20/22 09:44	1
Toluene-d8 (Surr)	100		80 - 117		10/20/22 09:44	1

Lab Sample ID: LCS 860-73963/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 73963

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04913		mg/L		98	75 - 125
Bromobenzene	0.0500	0.04865		mg/L		97	75 - 125
Bromochloromethane	0.0500	0.04956		mg/L		99	60 - 140
Bromodichloromethane	0.0500	0.05213		mg/L		104	75 - 125
Bromoform	0.0500	0.04943		mg/L		99	70 - 130
Bromomethane	0.0500	0.04560		mg/L		91	60 - 140
2-Butanone	0.250	0.2224		mg/L		89	60 - 140
Carbon tetrachloride	0.0500	0.05605		mg/L		112	70 - 130
Chlorobenzene	0.0500	0.04881		mg/L		98	65 - 135
Chloroethane	0.0500	0.04367		mg/L		87	60 - 140
Chloroform	0.0500	0.04914		mg/L		98	70 - 121
Chloromethane	0.0500	0.04783		mg/L		96	60 - 140
2-Chlorotoluene	0.0500	0.04978		mg/L		100	73 - 125
4-Chlorotoluene	0.0500	0.05053		mg/L		101	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04908		mg/L		98	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05203		mg/L		104	74 - 125
Dibromochloromethane	0.0500	0.05104		mg/L		102	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05340		mg/L		107	59 - 125
1,2-Dibromoethane	0.0500	0.04859		mg/L		97	73 - 125
1,2-Dichlorobenzene	0.0500	0.04877		mg/L		98	75 - 125
1,3-Dichlorobenzene	0.0500	0.05005		mg/L		100	75 - 125
1,4-Dichlorobenzene	0.0500	0.04791		mg/L		96	75 - 125
Dichlorodifluoromethane	0.0500	0.05565		mg/L		111	70 - 130

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-73963/3

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.04853		mg/L		97	70 - 130
1,2-Dichloroethane	0.0500	0.05296		mg/L		106	72 - 130
1,1-Dichloroethene	0.0500	0.05232		mg/L		105	50 - 150
1,2-Dichloropropane	0.0500	0.04935		mg/L		99	74 - 125
1,3-Dichloropropane	0.0500	0.04816		mg/L		96	75 - 125
2,2-Dichloropropane	0.0500	0.05225		mg/L		105	75 - 125
1,1-Dichloropropene	0.0500	0.05029		mg/L		101	75 - 125
Ethylbenzene	0.0500	0.05020		mg/L		100	75 - 125
Hexachlorobutadiene	0.0500	0.05285		mg/L		106	75 - 125
Isopropylbenzene	0.0500	0.05336		mg/L		107	75 - 125
Methylene Chloride	0.0500	0.04404		mg/L		88	75 - 125
m,p-Xylenes	0.0500	0.05161		mg/L		103	75 - 125
MTBE	0.0500	0.04916		mg/L		98	65 - 135
Naphthalene	0.0500	0.05137		mg/L		103	70 - 130
n-Butylbenzene	0.0500	0.05112		mg/L		102	75 - 125
N-Propylbenzene	0.0500	0.04972		mg/L		99	75 - 125
o-Xylene	0.0500	0.05186		mg/L		104	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05224		mg/L		104	75 - 125
sec-Butylbenzene	0.0500	0.05099		mg/L		102	75 - 125
Styrene	0.0500	0.05158		mg/L		103	75 - 125
tert-Butylbenzene	0.0500	0.05145		mg/L		103	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05110		mg/L		102	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04572		mg/L		91	74 - 125
Tetrachloroethene	0.0500	0.05194		mg/L		104	71 - 125
Toluene	0.0500	0.04986		mg/L		100	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04763		mg/L		95	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05084		mg/L		102	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05106		mg/L		102	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05217		mg/L		104	75 - 135
1,1,1-Trichloroethane	0.0500	0.05255		mg/L		105	70 - 130
1,1,2-Trichloroethane	0.0500	0.04745		mg/L		95	70 - 130
Trichloroethene	0.0500	0.05166		mg/L		103	75 - 135
Trichlorofluoromethane	0.0500	0.05342		mg/L		107	60 - 140
1,2,3-Trichloropropane	0.0500	0.04537		mg/L		91	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05146		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05124		mg/L		102	60 - 140
Vinyl chloride	0.0500	0.04794		mg/L		96	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	106		63 - 144
Toluene-d8 (Surr)	98		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-73963/4

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04778		mg/L		96	75 - 125	3	25
Bromobenzene	0.0500	0.04832		mg/L		97	75 - 125	1	25
Bromochloromethane	0.0500	0.05081		mg/L		102	60 - 140	3	25
Bromodichloromethane	0.0500	0.04987		mg/L		100	75 - 125	4	25
Bromoform	0.0500	0.04930		mg/L		99	70 - 130	0	25
Bromomethane	0.0500	0.04871		mg/L		97	60 - 140	7	25
2-Butanone	0.250	0.2365		mg/L		95	60 - 140	6	25
Carbon tetrachloride	0.0500	0.05585		mg/L		112	70 - 130	0	25
Chlorobenzene	0.0500	0.04696		mg/L		94	65 - 135	4	25
Chloroethane	0.0500	0.04556		mg/L		91	60 - 140	4	25
Chloroform	0.0500	0.05044		mg/L		101	70 - 121	3	25
Chloromethane	0.0500	0.04949		mg/L		99	60 - 140	3	25
2-Chlorotoluene	0.0500	0.05007		mg/L		100	73 - 125	1	25
4-Chlorotoluene	0.0500	0.05073		mg/L		101	74 - 125	0	25
cis-1,2-Dichloroethene	0.0500	0.04995		mg/L		100	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05087		mg/L		102	74 - 125	2	25
Dibromochloromethane	0.0500	0.04890		mg/L		98	73 - 125	4	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05449		mg/L		109	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.04861		mg/L		97	73 - 125	0	25
1,2-Dichlorobenzene	0.0500	0.04777		mg/L		96	75 - 125	2	25
1,3-Dichlorobenzene	0.0500	0.04891		mg/L		98	75 - 125	2	25
1,4-Dichlorobenzene	0.0500	0.04722		mg/L		94	75 - 125	1	25
Dichlorodifluoromethane	0.0500	0.05770		mg/L		115	70 - 130	4	25
1,1-Dichloroethane	0.0500	0.04927		mg/L		99	70 - 130	1	25
1,2-Dichloroethane	0.0500	0.05147		mg/L		103	72 - 130	3	25
1,1-Dichloroethene	0.0500	0.05464		mg/L		109	50 - 150	4	25
1,2-Dichloropropane	0.0500	0.04812		mg/L		96	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.04796		mg/L		96	75 - 125	0	25
2,2-Dichloropropane	0.0500	0.05385		mg/L		108	75 - 125	3	25
1,1-Dichloropropene	0.0500	0.05256		mg/L		105	75 - 125	4	25
Ethylbenzene	0.0500	0.04896		mg/L		98	75 - 125	3	25
Hexachlorobutadiene	0.0500	0.05732		mg/L		115	75 - 125	8	25
Isopropylbenzene	0.0500	0.05365		mg/L		107	75 - 125	1	25
Methylene Chloride	0.0500	0.04454		mg/L		89	75 - 125	1	25
m,p-Xylenes	0.0500	0.05104		mg/L		102	75 - 125	1	25
MTBE	0.0500	0.04979		mg/L		100	65 - 135	1	25
Naphthalene	0.0500	0.05247		mg/L		105	70 - 130	2	25
n-Butylbenzene	0.0500	0.05268		mg/L		105	75 - 125	3	25
N-Propylbenzene	0.0500	0.05082		mg/L		102	75 - 125	2	25
o-Xylene	0.0500	0.05066		mg/L		101	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05331		mg/L		107	75 - 125	2	25
sec-Butylbenzene	0.0500	0.05210		mg/L		104	75 - 125	2	25
Styrene	0.0500	0.05027		mg/L		101	75 - 125	3	25
tert-Butylbenzene	0.0500	0.05253		mg/L		105	75 - 125	2	25
1,1,1,2-Tetrachloroethane	0.0500	0.05038		mg/L		101	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.04469		mg/L		89	74 - 125	2	25
Tetrachloroethene	0.0500	0.05392		mg/L		108	71 - 125	4	25
Toluene	0.0500	0.04792		mg/L		96	70 - 130	4	25

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-73963/4

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.0500	0.05070		mg/L		101	75 - 125	6	25
trans-1,3-Dichloropropene	0.0500	0.04921		mg/L		98	66 - 125	3	25
1,2,3-Trichlorobenzene	0.0500	0.05200		mg/L		104	75 - 137	2	25
1,2,4-Trichlorobenzene	0.0500	0.05159		mg/L		103	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.05351		mg/L		107	70 - 130	2	25
1,1,2-Trichloroethane	0.0500	0.04680		mg/L		94	70 - 130	1	25
Trichloroethene	0.0500	0.04976		mg/L		100	75 - 135	4	25
Trichlorofluoromethane	0.0500	0.05588		mg/L		112	60 - 140	5	25
1,2,3-Trichloropropane	0.0500	0.04833		mg/L		97	75 - 125	6	25
1,2,4-Trimethylbenzene	0.0500	0.05182		mg/L		104	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.05177		mg/L		104	60 - 140	1	25
Vinyl chloride	0.0500	0.04961		mg/L		99	60 - 140	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	102		75 - 131
1,2-Dichloroethane-d4 (Surr)	103		63 - 144
Toluene-d8 (Surr)	97		80 - 117

Lab Sample ID: MB 860-74082/9

Matrix: Water

Analysis Batch: 74082

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533	mg/L		10/20/22 21:01	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		10/20/22 21:01	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		10/20/22 21:01	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		10/20/22 21:01	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		10/20/22 21:01	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		10/20/22 21:01	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		10/20/22 21:01	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		10/20/22 21:01	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		10/20/22 21:01	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		10/20/22 21:01	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		10/20/22 21:01	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		10/20/22 21:01	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		10/20/22 21:01	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		10/20/22 21:01	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		10/20/22 21:01	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		10/20/22 21:01	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		10/20/22 21:01	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		10/20/22 21:01	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		10/20/22 21:01	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		10/20/22 21:01	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		10/20/22 21:01	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		10/20/22 21:01	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		10/20/22 21:01	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		10/20/22 21:01	1

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-74082/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 74082

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L		10/20/22 21:01	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L		10/20/22 21:01	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L		10/20/22 21:01	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L		10/20/22 21:01	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L		10/20/22 21:01	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L		10/20/22 21:01	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L		10/20/22 21:01	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L		10/20/22 21:01	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613	mg/L		10/20/22 21:01	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L		10/20/22 21:01	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124	mg/L		10/20/22 21:01	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L		10/20/22 21:01	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L		10/20/22 21:01	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644	mg/L		10/20/22 21:01	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498	mg/L		10/20/22 21:01	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L		10/20/22 21:01	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919	mg/L		10/20/22 21:01	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468	mg/L		10/20/22 21:01	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L		10/20/22 21:01	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L		10/20/22 21:01	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L		10/20/22 21:01	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L		10/20/22 21:01	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L		10/20/22 21:01	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L		10/20/22 21:01	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L		10/20/22 21:01	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127	mg/L		10/20/22 21:01	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217	mg/L		10/20/22 21:01	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175	mg/L		10/20/22 21:01	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169	mg/L		10/20/22 21:01	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511	mg/L		10/20/22 21:01	1
Trichloroethene	<0.000791	U	0.00500	0.000791	mg/L		10/20/22 21:01	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638	mg/L		10/20/22 21:01	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490	mg/L		10/20/22 21:01	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417	mg/L		10/20/22 21:01	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456	mg/L		10/20/22 21:01	1
Vinyl chloride	<0.000638	U	0.00200	0.000638	mg/L		10/20/22 21:01	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L		10/20/22 21:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		74 - 124		10/20/22 21:01	1
Dibromofluoromethane (Surr)	100		75 - 131		10/20/22 21:01	1
1,2-Dichloroethane-d4 (Surr)	108		63 - 144		10/20/22 21:01	1
Toluene-d8 (Surr)	100		80 - 117		10/20/22 21:01	1

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-74082/3

Matrix: Water

Analysis Batch: 74082

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Benzene	0.0500	0.05105		mg/L		102	75 - 125
Bromobenzene	0.0500	0.05235		mg/L		105	75 - 125
Bromochloromethane	0.0500	0.05354		mg/L		107	60 - 140
Bromodichloromethane	0.0500	0.05383		mg/L		108	75 - 125
Bromoform	0.0500	0.05466		mg/L		109	70 - 130
Bromomethane	0.0500	0.05249		mg/L		105	60 - 140
2-Butanone	0.250	0.2396		mg/L		96	60 - 140
Carbon tetrachloride	0.0500	0.05647		mg/L		113	70 - 130
Chlorobenzene	0.0500	0.05210		mg/L		104	65 - 135
Chloroethane	0.0500	0.04639		mg/L		93	60 - 140
Chloroform	0.0500	0.05329		mg/L		107	70 - 121
Chloromethane	0.0500	0.05081		mg/L		102	60 - 140
2-Chlorotoluene	0.0500	0.05343		mg/L		107	73 - 125
4-Chlorotoluene	0.0500	0.05362		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05212		mg/L		104	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05353		mg/L		107	74 - 125
Dibromochloromethane	0.0500	0.05533		mg/L		111	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.06039		mg/L		121	59 - 125
1,2-Dibromoethane	0.0500	0.05237		mg/L		105	73 - 125
1,2-Dichlorobenzene	0.0500	0.05197		mg/L		104	75 - 125
1,3-Dichlorobenzene	0.0500	0.05276		mg/L		106	75 - 125
1,4-Dichlorobenzene	0.0500	0.05061		mg/L		101	75 - 125
Dichlorodifluoromethane	0.0500	0.05099		mg/L		102	70 - 130
1,1-Dichloroethane	0.0500	0.04998		mg/L		100	70 - 130
1,2-Dichloroethane	0.0500	0.05572		mg/L		111	72 - 130
1,1-Dichloroethene	0.0500	0.05201		mg/L		104	50 - 150
1,2-Dichloropropane	0.0500	0.05069		mg/L		101	74 - 125
1,3-Dichloropropane	0.0500	0.05218		mg/L		104	75 - 125
2,2-Dichloropropane	0.0500	0.05325		mg/L		107	75 - 125
1,1-Dichloropropene	0.0500	0.05111		mg/L		102	75 - 125
Ethylbenzene	0.0500	0.05298		mg/L		106	75 - 125
Hexachlorobutadiene	0.0500	0.05463		mg/L		109	75 - 125
Isopropylbenzene	0.0500	0.05597		mg/L		112	75 - 125
Methylene Chloride	0.0500	0.04738		mg/L		95	75 - 125
m,p-Xylenes	0.0500	0.05511		mg/L		110	75 - 125
MTBE	0.0500	0.05308		mg/L		106	65 - 135
Naphthalene	0.0500	0.05687		mg/L		114	70 - 130
n-Butylbenzene	0.0500	0.05244		mg/L		105	75 - 125
N-Propylbenzene	0.0500	0.05229		mg/L		105	75 - 125
o-Xylene	0.0500	0.05506		mg/L		110	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05379		mg/L		108	75 - 125
sec-Butylbenzene	0.0500	0.05352		mg/L		107	75 - 125
Styrene	0.0500	0.05557		mg/L		111	75 - 125
tert-Butylbenzene	0.0500	0.05420		mg/L		108	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05536		mg/L		111	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04966		mg/L		99	74 - 125
Tetrachloroethene	0.0500	0.05414		mg/L		108	71 - 125
Toluene	0.0500	0.05224		mg/L		104	70 - 130

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-74082/3

Matrix: Water

Analysis Batch: 74082

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	0.0500	0.05188		mg/L		104	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05392		mg/L		108	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05397		mg/L		108	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05567		mg/L		111	75 - 135
1,1,1-Trichloroethane	0.0500	0.05417		mg/L		108	70 - 130
1,1,2-Trichloroethane	0.0500	0.05188		mg/L		104	70 - 130
Trichloroethene	0.0500	0.05222		mg/L		104	75 - 135
Trichlorofluoromethane	0.0500	0.05126		mg/L		103	60 - 140
1,2,3-Trichloropropane	0.0500	0.05202		mg/L		104	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05478		mg/L		110	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05397		mg/L		108	60 - 140
Vinyl chloride	0.0500	0.04933		mg/L		99	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	104		63 - 144
Toluene-d8 (Surr)	99		80 - 117

Lab Sample ID: LCSD 860-74082/4

Matrix: Water

Analysis Batch: 74082

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04892		mg/L		98	75 - 125	4	25
Bromobenzene	0.0500	0.05135		mg/L		103	75 - 125	2	25
Bromochloromethane	0.0500	0.05101		mg/L		102	60 - 140	5	25
Bromodichloromethane	0.0500	0.05179		mg/L		104	75 - 125	4	25
Bromoform	0.0500	0.05452		mg/L		109	70 - 130	0	25
Bromomethane	0.0500	0.05365		mg/L		107	60 - 140	2	25
2-Butanone	0.250	0.2343		mg/L		94	60 - 140	2	25
Carbon tetrachloride	0.0500	0.05241		mg/L		105	70 - 130	7	25
Chlorobenzene	0.0500	0.05109		mg/L		102	65 - 135	2	25
Chloroethane	0.0500	0.04464		mg/L		89	60 - 140	4	25
Chloroform	0.0500	0.04998		mg/L		100	70 - 121	6	25
Chloromethane	0.0500	0.05044		mg/L		101	60 - 140	1	25
2-Chlorotoluene	0.0500	0.05128		mg/L		103	73 - 125	4	25
4-Chlorotoluene	0.0500	0.05112		mg/L		102	74 - 125	5	25
cis-1,2-Dichloroethene	0.0500	0.04925		mg/L		99	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.05156		mg/L		103	74 - 125	4	25
Dibromochloromethane	0.0500	0.05276		mg/L		106	73 - 125	5	25
1,2-Dibromo-3-Chloropropane	0.0500	0.06061		mg/L		121	59 - 125	0	25
1,2-Dibromoethane	0.0500	0.05321		mg/L		106	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05240		mg/L		105	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.05244		mg/L		105	75 - 125	1	25
1,4-Dichlorobenzene	0.0500	0.04986		mg/L		100	75 - 125	1	25
Dichlorodifluoromethane	0.0500	0.05090		mg/L		102	70 - 130	0	25
1,1-Dichloroethane	0.0500	0.04931		mg/L		99	70 - 130	1	25

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-74082/4

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 74082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloroethane	0.0500	0.05410		mg/L		108	72 - 130	3	25
1,1-Dichloroethene	0.0500	0.05012		mg/L		100	50 - 150	4	25
1,2-Dichloropropane	0.0500	0.04903		mg/L		98	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.05113		mg/L		102	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.05001		mg/L		100	75 - 125	6	25
1,1-Dichloropropene	0.0500	0.04864		mg/L		97	75 - 125	5	25
Ethylbenzene	0.0500	0.05107		mg/L		102	75 - 125	4	25
Hexachlorobutadiene	0.0500	0.05584		mg/L		112	75 - 125	2	25
Isopropylbenzene	0.0500	0.05433		mg/L		109	75 - 125	3	25
Methylene Chloride	0.0500	0.04436		mg/L		89	75 - 125	7	25
m,p-Xylenes	0.0500	0.05365		mg/L		107	75 - 125	3	25
MTBE	0.0500	0.05169		mg/L		103	65 - 135	3	25
Naphthalene	0.0500	0.05851		mg/L		117	70 - 130	3	25
n-Butylbenzene	0.0500	0.05156		mg/L		103	75 - 125	2	25
N-Propylbenzene	0.0500	0.05137		mg/L		103	75 - 125	2	25
o-Xylene	0.0500	0.05292		mg/L		106	75 - 125	4	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05449		mg/L		109	75 - 125	1	25
sec-Butylbenzene	0.0500	0.05293		mg/L		106	75 - 125	1	25
Styrene	0.0500	0.05367		mg/L		107	75 - 125	3	25
tert-Butylbenzene	0.0500	0.05357		mg/L		107	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.05334		mg/L		107	72 - 125	4	25
1,1,2,2-Tetrachloroethane	0.0500	0.05170		mg/L		103	74 - 125	4	25
Tetrachloroethene	0.0500	0.05384		mg/L		108	71 - 125	1	25
Toluene	0.0500	0.05013		mg/L		100	70 - 130	4	25
trans-1,2-Dichloroethene	0.0500	0.04773		mg/L		95	75 - 125	8	25
trans-1,3-Dichloropropene	0.0500	0.05233		mg/L		105	66 - 125	3	25
1,2,3-Trichlorobenzene	0.0500	0.05593		mg/L		112	75 - 137	4	25
1,2,4-Trichlorobenzene	0.0500	0.05596		mg/L		112	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.05034		mg/L		101	70 - 130	7	25
1,1,2-Trichloroethane	0.0500	0.04947		mg/L		99	70 - 130	5	25
Trichloroethene	0.0500	0.05098		mg/L		102	75 - 135	2	25
Trichlorofluoromethane	0.0500	0.04927		mg/L		99	60 - 140	4	25
1,2,3-Trichloropropane	0.0500	0.05365		mg/L		107	75 - 125	3	25
1,2,4-Trimethylbenzene	0.0500	0.05404		mg/L		108	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.05350		mg/L		107	60 - 140	1	25
Vinyl chloride	0.0500	0.04991		mg/L		100	60 - 140	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	106		63 - 144
Toluene-d8 (Surr)	99		80 - 117

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 860-74251/1-A

Matrix: Water

Analysis Batch: 74205

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 74251

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.988	U	5.00	0.988 mg/L		10/21/22 12:06	10/21/22 14:51	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		10/21/22 12:06	10/21/22 14:51	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		10/21/22 12:06	10/21/22 14:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 135			10/21/22 12:06	10/21/22 14:51	1
o-Terphenyl	115		70 - 135			10/21/22 12:06	10/21/22 14:51	1

Lab Sample ID: LCS 860-74251/2-A

Matrix: Water

Analysis Batch: 74205

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 74251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.7	122.4		mg/L		123	70 - 135
Diesel Range Organics (Over C10-C28)	99.5	96.61		mg/L		97	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	95		70 - 135				
o-Terphenyl	95		70 - 135				

Lab Sample ID: LCSD 860-74251/3-A

Matrix: Water

Analysis Batch: 74205

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 74251

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.7	126.7		mg/L		127	70 - 135	3	35
Diesel Range Organics (Over C10-C28)	99.5	98.92		mg/L		99	70 - 135	2	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	95		70 - 135						
o-Terphenyl	93		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-74154/3

Matrix: Water

Analysis Batch: 74154

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			10/20/22 22:57	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/20/22 22:57	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/20/22 22:57	1

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-74154/4

Matrix: Water

Analysis Batch: 74154

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.213		mg/L		92	90 - 110
Fluoride	10.0	9.731		mg/L		97	90 - 110
Sulfate	10.0	9.780		mg/L		98	90 - 110

Lab Sample ID: LCSD 860-74154/5

Matrix: Water

Analysis Batch: 74154

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.090		mg/L		91	90 - 110	1	20
Fluoride	10.0	9.750		mg/L		97	90 - 110	0	20
Sulfate	10.0	9.453		mg/L		95	90 - 110	3	20

Lab Sample ID: LLCS 860-74154/7

Matrix: Water

Analysis Batch: 74154

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5196		mg/L		104	50 - 150
Fluoride	0.500	0.4635	J	mg/L		93	50 - 150
Sulfate	0.500	0.4426	J	mg/L		89	50 - 150

Lab Sample ID: 880-20548-2 MS

Matrix: Water

Analysis Batch: 74154

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	51.2	F2	10.0	210.9	4	mg/L		1597	90 - 110
Fluoride	<0.100	U F1	10.0	<0.100	U F1	mg/L		0	90 - 110
Sulfate	48.5	F2	10.0	58.45	4	mg/L		100	90 - 110

Lab Sample ID: 880-20548-2 MSD

Matrix: Water

Analysis Batch: 74154

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	51.2	F2	10.0	54.05	4 F2	mg/L		28	90 - 110	118	20
Fluoride	<0.100	U F1	10.0	<0.100	U F1	mg/L		0	90 - 110	NC	20
Sulfate	48.5	F2	10.0	0.6587	4 F2	mg/L		-478	90 - 110	196	20

Lab Sample ID: MB 860-74155/3

Matrix: Water

Analysis Batch: 74155

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.05578	J	0.100	0.0391 mg/L			10/20/22 22:57	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/20/22 22:57	1

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-74155/4

Matrix: Water

Analysis Batch: 74155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.176		mg/L		92	80 - 120
Nitrite as N	5.00	4.653		mg/L		93	80 - 120

Lab Sample ID: LCSD 860-74155/5

Matrix: Water

Analysis Batch: 74155

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	9.253		mg/L		93	80 - 120	1	20
Nitrite as N	5.00	4.553		mg/L		91	80 - 120	2	20

Lab Sample ID: LLCS 860-74155/6

Matrix: Water

Analysis Batch: 74155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.1153		mg/L		115	50 - 150
Nitrite as N	0.100	0.1080		mg/L		108	50 - 150

Lab Sample ID: 880-20548-2 MS

Matrix: Water

Analysis Batch: 74155

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.101	B F1 F2	10.0	0.1071	F1	mg/L		0.07	80 - 120
Nitrite as N	<0.0293	U F1	2.50	<0.0293	U F1	mg/L		0	80 - 120

Lab Sample ID: 880-20548-2 MSD

Matrix: Water

Analysis Batch: 74155

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.101	B F1 F2	10.0	0.08279	J F1 F2	mg/L		-0.2	80 - 120	26	15
Nitrite as N	<0.0293	U F1	2.50	<0.0293	U F1	mg/L		0	80 - 120	NC	15

Lab Sample ID: MB 860-74282/3

Matrix: Water

Analysis Batch: 74282

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			10/21/22 14:15	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/21/22 14:15	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/21/22 14:15	1

Lab Sample ID: MB 860-74282/68

Matrix: Water

Analysis Batch: 74282

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			10/21/22 23:54	1

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-74282/68

Matrix: Water

Analysis Batch: 74282

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.100	U	0.500	0.100 mg/L			10/21/22 23:54	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/21/22 23:54	1

Lab Sample ID: LCS 860-74282/69

Matrix: Water

Analysis Batch: 74282

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.776		mg/L		98	90 - 110
Fluoride	10.0	10.76		mg/L		108	90 - 110
Sulfate	10.0	9.673		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-74282/70

Matrix: Water

Analysis Batch: 74282

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.785		mg/L		98	90 - 110	0	20
Fluoride	10.0	10.78		mg/L		108	90 - 110	0	20
Sulfate	10.0	9.683		mg/L		97	90 - 110	0	20

Lab Sample ID: LLCS 860-74282/7

Matrix: Water

Analysis Batch: 74282

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.4568	J	mg/L		91	50 - 150
Fluoride	0.500	0.5042		mg/L		101	50 - 150
Sulfate	0.500	0.5106		mg/L		102	50 - 150

Lab Sample ID: MB 860-74283/3

Matrix: Water

Analysis Batch: 74283

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.04917	J	0.100	0.0391 mg/L			10/21/22 14:15	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/21/22 14:15	1

Lab Sample ID: MB 860-74283/68

Matrix: Water

Analysis Batch: 74283

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			10/21/22 23:54	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/21/22 23:54	1

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-74283/69

Matrix: Water

Analysis Batch: 74283

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.669		mg/L		97	80 - 120
Nitrite as N	5.00	4.910		mg/L		98	80 - 120

Lab Sample ID: LCSD 860-74283/70

Matrix: Water

Analysis Batch: 74283

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	9.687		mg/L		97	80 - 120	0	20
Nitrite as N	5.00	4.922		mg/L		98	80 - 120	0	20

Lab Sample ID: LLCS 860-74283/6

Matrix: Water

Analysis Batch: 74283

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.1134		mg/L		113	50 - 150
Nitrite as N	0.100	0.07408	J	mg/L		74	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-74219/4

Matrix: Water

Analysis Batch: 74219

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	mg/L			10/20/22 16:17	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			10/20/22 16:17	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			10/20/22 16:17	1

Lab Sample ID: LCS 860-74219/5

Matrix: Water

Analysis Batch: 74219

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	248.7		mg/L		99	85 - 115

Lab Sample ID: LCSD 860-74219/6

Matrix: Water

Analysis Batch: 74219

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	254.4		mg/L		102	85 - 115	2	20

Lab Sample ID: 880-20548-1 DU

Matrix: Water

Analysis Batch: 74219

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	283		265.9		mg/L		6	20

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QC Sample Results

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 880-20548-1 DU

Matrix: Water

Analysis Batch: 74219

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Bicarbonate Alkalinity as CaCO3	283		265.9		mg/L		6	20
Carbonate Alkalinity as CaCO3	<4.00	U	<4.00	U	mg/L		NC	20

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-20548-1 DU

Matrix: Water

Analysis Batch: 74123

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.4	HF	7.4		SU		0.5	20
Temperature	18.4	HF	18.4		Celsius		0	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-74339/1

Matrix: Water

Analysis Batch: 74339

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.495	U	5.00	0.495 mg/L			10/21/22 17:38	1

Lab Sample ID: LCS 860-74339/2

Matrix: Water

Analysis Batch: 74339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	50.0	45.80		mg/L		92	80 - 120

Lab Sample ID: LCSD 860-74339/3

Matrix: Water

Analysis Batch: 74339

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfide	50.0	45.60		mg/L		91	80 - 120	0	20

Lab Sample ID: 880-20548-1 MS

Matrix: Water

Analysis Batch: 74339

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<0.495	U	50.0	46.00		mg/L		92	80 - 120

Lab Sample ID: 880-20548-1 MSD

Matrix: Water

Analysis Batch: 74339

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfide	<0.495	U	50.0	46.00		mg/L		92	80 - 120	0	20

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 73963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-2	MW-2	Total/NA	Water	8260C	
MB 860-73963/9	Method Blank	Total/NA	Water	8260C	
LCS 860-73963/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-73963/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 74082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	8260C	
MB 860-74082/9	Method Blank	Total/NA	Water	8260C	
LCS 860-74082/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-74082/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 73355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	8015 NM	
880-20548-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 74205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	8015B NM	74251
880-20548-2	MW-2	Total/NA	Water	8015B NM	74251
MB 860-74251/1-A	Method Blank	Total/NA	Water	8015B NM	74251
LCS 860-74251/2-A	Lab Control Sample	Total/NA	Water	8015B NM	74251
LCSD 860-74251/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	74251

Prep Batch: 74251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-20548-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-74251/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-74251/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-74251/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 74154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	300.0	
880-20548-2	MW-2	Total/NA	Water	300.0	
MB 860-74154/3	Method Blank	Total/NA	Water	300.0	
LCS 860-74154/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-74154/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-74154/7	Lab Control Sample	Total/NA	Water	300.0	
880-20548-2 MS	MW-2	Total/NA	Water	300.0	
880-20548-2 MSD	MW-2	Total/NA	Water	300.0	

Analysis Batch: 74155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	300.0	
880-20548-2	MW-2	Total/NA	Water	300.0	

Eurofins Midland

QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

HPLC/IC (Continued)

Analysis Batch: 74155 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-74155/3	Method Blank	Total/NA	Water	300.0	
LCS 860-74155/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-74155/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-74155/6	Lab Control Sample	Total/NA	Water	300.0	
880-20548-2 MS	MW-2	Total/NA	Water	300.0	
880-20548-2 MSD	MW-2	Total/NA	Water	300.0	

Analysis Batch: 74282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-74282/3	Method Blank	Total/NA	Water	300.0	
MB 860-74282/68	Method Blank	Total/NA	Water	300.0	
LCS 860-74282/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-74282/70	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-74282/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 74283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-74283/3	Method Blank	Total/NA	Water	300.0	
MB 860-74283/68	Method Blank	Total/NA	Water	300.0	
LCS 860-74283/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-74283/70	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-74283/6	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 74123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-20548-2	MW-2	Total/NA	Water	SM 4500 H+ B	
880-20548-1 DU	MW-1	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 74219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	SM 2320B	
880-20548-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-74219/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-74219/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-74219/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
880-20548-1 DU	MW-1	Total/NA	Water	SM 2320B	

Analysis Batch: 74339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-20548-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-74339/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-74339/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-74339/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-20548-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-20548-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

QC Association Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

General Chemistry

Analysis Batch: 74517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20548-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-20548-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

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Lab Chronicle

Client: Ensolum

Job ID: 880-20548-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20548-1

Date Collected: 10/19/22 12:25

Matrix: Water

Date Received: 10/19/22 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	74082	NA	EET HOU	10/21/22 01:28
Total/NA	Analysis	8015 NM		1	73355	DD	EET HOU	10/21/22 16:36
Total/NA	Prep	8015NM Aq Prep			74251	SYH	EET HOU	10/21/22 12:06
Total/NA	Analysis	8015B NM		1	74205	CZT	EET HOU	10/21/22 15:11
Total/NA	Analysis	300.0		1	74154	A1S	EET HOU	10/21/22 02:08
Total/NA	Analysis	300.0		1	74155	A1S	EET HOU	10/21/22 02:08
Total/NA	Analysis	SM 2320B		1	74219	TL	EET HOU	10/20/22 16:44
Total/NA	Analysis	SM 4500 CO2 D		1	74517	SC	EET HOU	10/24/22 13:30
Total/NA	Analysis	SM 4500 H+ B		1	74123	TL	EET HOU	10/20/22 16:20
Total/NA	Analysis	SM 4500 S2 F		1	74339	SCI	EET HOU	10/21/22 17:38

Client Sample ID: MW-2

Lab Sample ID: 880-20548-2

Date Collected: 10/19/22 13:25

Matrix: Water

Date Received: 10/19/22 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	73963	NA	EET HOU	10/20/22 16:34
Total/NA	Analysis	8015 NM		1	73355	DD	EET HOU	10/21/22 16:36
Total/NA	Prep	8015NM Aq Prep			74251	SYH	EET HOU	10/21/22 12:06
Total/NA	Analysis	8015B NM		1	74205	CZT	EET HOU	10/21/22 15:30
Total/NA	Analysis	300.0		1	74154	A1S	EET HOU	10/21/22 02:20
Total/NA	Analysis	300.0		1	74155	A1S	EET HOU	10/21/22 02:20
Total/NA	Analysis	SM 2320B		1	74219	TL	EET HOU	10/20/22 17:21
Total/NA	Analysis	SM 4500 CO2 D		1	74517	SC	EET HOU	10/24/22 13:30
Total/NA	Analysis	SM 4500 H+ B		1	74123	TL	EET HOU	10/20/22 16:20
Total/NA	Analysis	SM 4500 S2 F		1	74339	SCI	EET HOU	10/21/22 17:38

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-47	06-30-23

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
8015 NM		Water	Total TPH
8015B NM	8015NM Aq Prep	Water	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Aq Prep	Water	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Aq Prep	Water	Oil Range Organics (Over C28-C36)
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 4500 CO2 D		Water	Carbon dioxide
SM 4500 CO2 D		Water	Carbon Dioxide, Free
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	MCAWW	EET HOU
SM 2320B	Alkalinity	SM	EET HOU
SM 4500 CO2 D	Carbon Dioxide and Forms of Alkalinity by Calculation	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
SM 4500 S2 F	Sulfide, Total	SM	EET HOU
5030C	Purge and Trap	SW846	EET HOU
8015NM Aq Prep	Microextraction	SW846	EET HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20548-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20548-1	MW-1	Water	10/19/22 12:25	10/19/22 16:00
880-20548-2	MW-2	Water	10/19/22 13:25	10/19/22 16:00

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Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs, NM (575) 382-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

Work Order No: 20548

Project Manager: Beaux Jennings
Company Name: Ensolum LLC
Address: 601 Marnefeld #400
City, State ZIP: Midland TX 79701
Phone: 432-230-3344
Email: bjennings@ensolum.com

Program: ☐ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund
State of Project: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV
Reporting Level: ☐ EDD ☐ ADAPT ☐ Other

Project Name: South Hobbs
Project Number: 03B1417002
P.O. Number: 03B1417002
Sampler's Name: Shane Diller
Turn Around: ☐ Routine ☐ Rush 24 Hr
Due Date:
ANALYSIS REQUEST

SAMPLE RECEIPT
Temperature (°C): 8.6/5.3
Received Inact: Yes No
Cooler Custody Seals: Yes No
Sample Custody Seals: Yes No
Temp Blank: Yes No
Wet los: Yes No
Thermometer ID: 30
Correction Factor: 1.0
Total Containers: 1

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Dissolved Carbon Dioxide 4500 CO2 c	Dissolved Sulfide SW-846 #376.2	VOC SW-846 #8260	TPH EPA Method #8015	Chloride EPA Method #846 300	pH EPA SW-846 Method 150.1
MW-1	GW	10-19-22	1225	-	7	X	X	X	X	X	X
MW-2	GW	10-19-22	1325	-	7	X	X	X	X	X	X

CUSTODY SEAL
DATE: 10-19-22
SIGNATURE: [Signature]
QEC
Quality Environmental Containers
800-255-3950
www.qecusa.com

Total 200.7 / 6010 200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
1631 / 245.1 / 7470 / 7471 Hg

Relinquished by: (Signature) [Signature]
Received by: (Signature) [Signature]
Date/Time: 10/19/22
Relinquished by: (Signature) [Signature]
Received by: (Signature) [Signature]
Date/Time: 10/19/22

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone: 432-704-5440

Chain of Custody Record



Environment Testing
America



Client Information (Sub Contract Lab)		Sampler	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact		Kramer Jessica	Kramer Jessica	880-5515-1	880-5515-1
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:
Company:		Jessica Kramer@eurofins.com	Jessica Kramer@eurofins.com	New Mexico	Page 1 of 1
Eurofins Environment Testing South Cent		Accreditations Required (See note):		Job #:	Preservation Codes:
Address:		NELAP Texas		880-20548-1	A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Y Trizma Z other (specify)
Due Date Requested:		Analysis Requested			
10/21/2022		SM4500 CO2 D (MOD) Carbon Dioxide SM4500 H+ SM4500 S2 F Sulfide, Total 8260C/5030C (MOD) Full List VOCs 8015MOD NM/8015NM Aq Prep (MOD) Full TPH 300 ORGFM 28D (MOD) Custom List 300 ORGFM (MOD) Custom List 220B (MOD) Copy Analyses 8015MOD Calc			
TAT Requested (days):		Total Number of Containers			
PO #:		7			
WO #:					
Project #:					
880000023					
Site:					
South Hobbs					
Sample Identification	Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=Other)
MW-1 (880-20548-1)		10/19/22	12:25 Mountain	Water	DI Water
Special Instructions/Note:					
DISSOLVED SULFIDE					
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. All requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested I II III IV Other (specify)					
Primary Deliverable Rank 2					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
☐ Return To Client ☐ Disposal By Lab ☐ Archive For					
Special Instructions/QC Requirements					
Empty Kit Relinquished by					
Date/Time:					
Relinquished by					
Date/Time:					
Relinquished by					
Date/Time:					
Custody Seals Intact					
Custody Seal No.					
Cooler Temperature(s) °C and Other Remarks:					
Temp: 1.2 IRID-HOU-344					
C/F +1.2					
Corrected Temp: 2.4					
6/08/2021					



Environment Testing
America

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities related to the business. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental setup and the procedures followed during the study.

3. The third part of the document presents the results of the study, showing the data collected and the analysis performed. It includes tables and figures that illustrate the findings of the research.

4. The fourth part of the document discusses the implications of the results and the conclusions drawn from the study. It highlights the significance of the findings and their potential impact on the field of research.

5. The fifth part of the document provides a summary of the key points discussed throughout the document. It reiterates the main findings and the conclusions reached, providing a clear and concise overview of the study.

[illegible]

Environment Testing
America

[illegible]

6/08/2021

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20548-1

Login Number: 20548

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20548-1

Login Number: 20548

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Houston

List Creation: 10/20/22 11:38 AM

Question	Answer	Comment
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-20549-1

Laboratory Sample Delivery Group: Hobbs NM

Client Project/Site: Levey Well Hobbs, NM - 03B1417001

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/31/2022 4:19:26 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Laboratory Job ID: 880-20549-1
SDG: Hobbs NM

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Definitions/Glossary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Eurofins Midland

Case Narrative

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Job ID: 880-20549-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-20549-1

Receipt

The sample was received on 10/19/2022 4:00 PM. 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 3.3°C

GC/MS VOA

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-73963 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

Method 300_ORGFMS: The method blank contained <nitrate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 300_ORGFMS: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. Levey Well (880-20549-1)

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

Metals

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

General Chemistry

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

Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-20549-1

Date Collected: 10/19/22 11:45

Matrix: Water

Date Received: 10/19/22 16:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00241		0.00100	0.000533 mg/L			10/20/22 16:55	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/20/22 16:55	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/20/22 16:55	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/20/22 16:55	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/20/22 16:55	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/20/22 16:55	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/20/22 16:55	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/20/22 16:55	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/20/22 16:55	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/20/22 16:55	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/20/22 16:55	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/20/22 16:55	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/20/22 16:55	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/20/22 16:55	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/20/22 16:55	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/20/22 16:55	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/20/22 16:55	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 16:55	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/20/22 16:55	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/20/22 16:55	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 16:55	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 16:55	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 16:55	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/20/22 16:55	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/20/22 16:55	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/20/22 16:55	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/20/22 16:55	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/20/22 16:55	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/20/22 16:55	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/20/22 16:55	1
Ethylbenzene	0.00791		0.00100	0.000411 mg/L			10/20/22 16:55	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/20/22 16:55	1
Isopropylbenzene	0.00396		0.00100	0.000613 mg/L			10/20/22 16:55	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/20/22 16:55	1
m,p-Xylenes	0.0332		0.0100	0.00124 mg/L			10/20/22 16:55	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/20/22 16:55	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/20/22 16:55	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 16:55	1
N-Propylbenzene	0.00177		0.00100	0.000498 mg/L			10/20/22 16:55	1
o-Xylene	0.00477		0.00100	0.000551 mg/L			10/20/22 16:55	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 16:55	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/20/22 16:55	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/20/22 16:55	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/20/22 16:55	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 16:55	1
1,1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/20/22 16:55	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/20/22 16:55	1
Toluene	0.0175		0.00100	0.000475 mg/L			10/20/22 16:55	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/20/22 16:55	1

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Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-20549-1

Date Collected: 10/19/22 11:45

Matrix: Water

Date Received: 10/19/22 16:00

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 16:55	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/20/22 16:55	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/20/22 16:55	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/20/22 16:55	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/20/22 16:55	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/20/22 16:55	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/20/22 16:55	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/20/22 16:55	1
1,2,4-Trimethylbenzene	0.00751		0.00100	0.000417 mg/L			10/20/22 16:55	1
1,3,5-Trimethylbenzene	0.00245		0.00100	0.000456 mg/L			10/20/22 16:55	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/20/22 16:55	1
Xylenes, Total	0.0380		0.0100	0.00124 mg/L			10/20/22 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		10/20/22 16:55	1
Dibromofluoromethane (Surr)	100		75 - 131		10/20/22 16:55	1
1,2-Dichloroethane-d4 (Surr)	109		63 - 144		10/20/22 16:55	1
Toluene-d8 (Surr)	101		80 - 117		10/20/22 16:55	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	1.08	J	2.50	0.356 mg/L			10/26/22 00:46	5
Nitrate as N	0.359	H	0.100	0.0391 mg/L			10/26/22 01:22	1
Chloride	206		2.50	1.00 mg/L			10/26/22 00:46	5
Nitrite as N	<0.0293	U H	0.100	0.0293 mg/L			10/26/22 01:22	1
Fluoride	0.612	J	2.50	0.500 mg/L			10/26/22 00:46	5
Sulfate	46.0		2.50	0.544 mg/L			10/26/22 00:46	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	250		10.0	5.76 mg/L		10/21/22 08:41	10/21/22 14:57	50
Magnesium	51.3		0.200	0.0428 mg/L		10/21/22 08:41	10/21/22 14:42	1
Potassium	4.05		0.500	0.0914 mg/L		10/21/22 08:41	10/21/22 14:42	1
Sodium	81.9		0.500	0.152 mg/L		10/21/22 08:41	10/21/22 14:42	1
SiO2	69.1		1.07	0.471 mg/L		10/21/22 08:41	10/21/22 14:42	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	-5.64			%			10/24/22 13:07	1
Alkalinity (SM 2320B)	676		4.00	4.00 mg/L			10/20/22 17:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	676		4.00	4.00 mg/L			10/20/22 17:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/20/22 17:32	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/20/22 17:32	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/20/22 17:32	1
Total Dissolved Solids (SM 2540C)	1340		10.0	10.0 mg/L			10/20/22 11:28	1
pH (SM 4500 H+ B)	6.6	HF		SU			10/20/22 16:20	1
Temperature (SM 4500 H+ B)	18.3	HF		Celsius			10/20/22 16:20	1

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Surrogate Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS
Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
860-35253-K-1 MS	Matrix Spike	101	98	103	99
880-20549-1	Levey Well	100	100	109	101
LCS 860-73963/3	Lab Control Sample	99	98	106	98
LCSD 860-73963/4	Lab Control Sample Dup	99	102	103	97
MB 860-73963/9	Method Blank	98	98	104	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-73963/9

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/20/22 09:44	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/20/22 09:44	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/20/22 09:44	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/20/22 09:44	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/20/22 09:44	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/20/22 09:44	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/20/22 09:44	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/20/22 09:44	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/20/22 09:44	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/20/22 09:44	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/20/22 09:44	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/20/22 09:44	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/20/22 09:44	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/20/22 09:44	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/20/22 09:44	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/20/22 09:44	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/20/22 09:44	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 09:44	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/20/22 09:44	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/20/22 09:44	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 09:44	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/20/22 09:44	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 09:44	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/20/22 09:44	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/20/22 09:44	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/20/22 09:44	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/20/22 09:44	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/20/22 09:44	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/20/22 09:44	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/20/22 09:44	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/20/22 09:44	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/20/22 09:44	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/20/22 09:44	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/20/22 09:44	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/20/22 09:44	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/20/22 09:44	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/20/22 09:44	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 09:44	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/20/22 09:44	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/20/22 09:44	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/20/22 09:44	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/20/22 09:44	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/20/22 09:44	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/20/22 09:44	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/20/22 09:44	1
1,1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/20/22 09:44	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/20/22 09:44	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/20/22 09:44	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-73963/9

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/20/22 09:44	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/20/22 09:44	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/20/22 09:44	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/20/22 09:44	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/20/22 09:44	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/20/22 09:44	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/20/22 09:44	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/20/22 09:44	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/20/22 09:44	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/20/22 09:44	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/20/22 09:44	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/20/22 09:44	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/20/22 09:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		10/20/22 09:44	1
Dibromofluoromethane (Surr)	98		75 - 131		10/20/22 09:44	1
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		10/20/22 09:44	1
Toluene-d8 (Surr)	100		80 - 117		10/20/22 09:44	1

Lab Sample ID: LCS 860-73963/3

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04913		mg/L		98	75 - 125
Bromobenzene	0.0500	0.04865		mg/L		97	75 - 125
Bromochloromethane	0.0500	0.04956		mg/L		99	60 - 140
Bromodichloromethane	0.0500	0.05213		mg/L		104	75 - 125
Bromoform	0.0500	0.04943		mg/L		99	70 - 130
Bromomethane	0.0500	0.04560		mg/L		91	60 - 140
2-Butanone	0.250	0.2224		mg/L		89	60 - 140
Carbon tetrachloride	0.0500	0.05605		mg/L		112	70 - 130
Chlorobenzene	0.0500	0.04881		mg/L		98	65 - 135
Chloroethane	0.0500	0.04367		mg/L		87	60 - 140
Chloroform	0.0500	0.04914		mg/L		98	70 - 121
Chloromethane	0.0500	0.04783		mg/L		96	60 - 140
2-Chlorotoluene	0.0500	0.04978		mg/L		100	73 - 125
4-Chlorotoluene	0.0500	0.05053		mg/L		101	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04908		mg/L		98	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05203		mg/L		104	74 - 125
Dibromochloromethane	0.0500	0.05104		mg/L		102	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05340		mg/L		107	59 - 125
1,2-Dibromoethane	0.0500	0.04859		mg/L		97	73 - 125
1,2-Dichlorobenzene	0.0500	0.04877		mg/L		98	75 - 125
1,3-Dichlorobenzene	0.0500	0.05005		mg/L		100	75 - 125
1,4-Dichlorobenzene	0.0500	0.04791		mg/L		96	75 - 125
Dichlorodifluoromethane	0.0500	0.05565		mg/L		111	70 - 130

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-73963/3

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.04853		mg/L		97	70 - 130
1,2-Dichloroethane	0.0500	0.05296		mg/L		106	72 - 130
1,1-Dichloroethene	0.0500	0.05232		mg/L		105	50 - 150
1,2-Dichloropropane	0.0500	0.04935		mg/L		99	74 - 125
1,3-Dichloropropane	0.0500	0.04816		mg/L		96	75 - 125
2,2-Dichloropropane	0.0500	0.05225		mg/L		105	75 - 125
1,1-Dichloropropene	0.0500	0.05029		mg/L		101	75 - 125
Ethylbenzene	0.0500	0.05020		mg/L		100	75 - 125
Hexachlorobutadiene	0.0500	0.05285		mg/L		106	75 - 125
Isopropylbenzene	0.0500	0.05336		mg/L		107	75 - 125
Methylene Chloride	0.0500	0.04404		mg/L		88	75 - 125
m,p-Xylenes	0.0500	0.05161		mg/L		103	75 - 125
MTBE	0.0500	0.04916		mg/L		98	65 - 135
Naphthalene	0.0500	0.05137		mg/L		103	70 - 130
n-Butylbenzene	0.0500	0.05112		mg/L		102	75 - 125
N-Propylbenzene	0.0500	0.04972		mg/L		99	75 - 125
o-Xylene	0.0500	0.05186		mg/L		104	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05224		mg/L		104	75 - 125
sec-Butylbenzene	0.0500	0.05099		mg/L		102	75 - 125
Styrene	0.0500	0.05158		mg/L		103	75 - 125
tert-Butylbenzene	0.0500	0.05145		mg/L		103	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05110		mg/L		102	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04572		mg/L		91	74 - 125
Tetrachloroethene	0.0500	0.05194		mg/L		104	71 - 125
Toluene	0.0500	0.04986		mg/L		100	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04763		mg/L		95	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05084		mg/L		102	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05106		mg/L		102	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05217		mg/L		104	75 - 135
1,1,1-Trichloroethane	0.0500	0.05255		mg/L		105	70 - 130
1,1,2-Trichloroethane	0.0500	0.04745		mg/L		95	70 - 130
Trichloroethene	0.0500	0.05166		mg/L		103	75 - 135
Trichlorofluoromethane	0.0500	0.05342		mg/L		107	60 - 140
1,2,3-Trichloropropane	0.0500	0.04537		mg/L		91	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05146		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05124		mg/L		102	60 - 140
Vinyl chloride	0.0500	0.04794		mg/L		96	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	106		63 - 144
Toluene-d8 (Surr)	98		80 - 117

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-73963/4

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04778		mg/L		96	75 - 125	3	25
Bromobenzene	0.0500	0.04832		mg/L		97	75 - 125	1	25
Bromochloromethane	0.0500	0.05081		mg/L		102	60 - 140	3	25
Bromodichloromethane	0.0500	0.04987		mg/L		100	75 - 125	4	25
Bromoform	0.0500	0.04930		mg/L		99	70 - 130	0	25
Bromomethane	0.0500	0.04871		mg/L		97	60 - 140	7	25
2-Butanone	0.250	0.2365		mg/L		95	60 - 140	6	25
Carbon tetrachloride	0.0500	0.05585		mg/L		112	70 - 130	0	25
Chlorobenzene	0.0500	0.04696		mg/L		94	65 - 135	4	25
Chloroethane	0.0500	0.04556		mg/L		91	60 - 140	4	25
Chloroform	0.0500	0.05044		mg/L		101	70 - 121	3	25
Chloromethane	0.0500	0.04949		mg/L		99	60 - 140	3	25
2-Chlorotoluene	0.0500	0.05007		mg/L		100	73 - 125	1	25
4-Chlorotoluene	0.0500	0.05073		mg/L		101	74 - 125	0	25
cis-1,2-Dichloroethene	0.0500	0.04995		mg/L		100	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05087		mg/L		102	74 - 125	2	25
Dibromochloromethane	0.0500	0.04890		mg/L		98	73 - 125	4	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05449		mg/L		109	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.04861		mg/L		97	73 - 125	0	25
1,2-Dichlorobenzene	0.0500	0.04777		mg/L		96	75 - 125	2	25
1,3-Dichlorobenzene	0.0500	0.04891		mg/L		98	75 - 125	2	25
1,4-Dichlorobenzene	0.0500	0.04722		mg/L		94	75 - 125	1	25
Dichlorodifluoromethane	0.0500	0.05770		mg/L		115	70 - 130	4	25
1,1-Dichloroethane	0.0500	0.04927		mg/L		99	70 - 130	1	25
1,2-Dichloroethane	0.0500	0.05147		mg/L		103	72 - 130	3	25
1,1-Dichloroethene	0.0500	0.05464		mg/L		109	50 - 150	4	25
1,2-Dichloropropane	0.0500	0.04812		mg/L		96	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.04796		mg/L		96	75 - 125	0	25
2,2-Dichloropropane	0.0500	0.05385		mg/L		108	75 - 125	3	25
1,1-Dichloropropene	0.0500	0.05256		mg/L		105	75 - 125	4	25
Ethylbenzene	0.0500	0.04896		mg/L		98	75 - 125	3	25
Hexachlorobutadiene	0.0500	0.05732		mg/L		115	75 - 125	8	25
Isopropylbenzene	0.0500	0.05365		mg/L		107	75 - 125	1	25
Methylene Chloride	0.0500	0.04454		mg/L		89	75 - 125	1	25
m,p-Xylenes	0.0500	0.05104		mg/L		102	75 - 125	1	25
MTBE	0.0500	0.04979		mg/L		100	65 - 135	1	25
Naphthalene	0.0500	0.05247		mg/L		105	70 - 130	2	25
n-Butylbenzene	0.0500	0.05268		mg/L		105	75 - 125	3	25
N-Propylbenzene	0.0500	0.05082		mg/L		102	75 - 125	2	25
o-Xylene	0.0500	0.05066		mg/L		101	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05331		mg/L		107	75 - 125	2	25
sec-Butylbenzene	0.0500	0.05210		mg/L		104	75 - 125	2	25
Styrene	0.0500	0.05027		mg/L		101	75 - 125	3	25
tert-Butylbenzene	0.0500	0.05253		mg/L		105	75 - 125	2	25
1,1,1,2-Tetrachloroethane	0.0500	0.05038		mg/L		101	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.04469		mg/L		89	74 - 125	2	25
Tetrachloroethene	0.0500	0.05392		mg/L		108	71 - 125	4	25
Toluene	0.0500	0.04792		mg/L		96	70 - 130	4	25

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-73963/4

Matrix: Water

Analysis Batch: 73963

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.0500	0.05070		mg/L		101	75 - 125	6	25
trans-1,3-Dichloropropene	0.0500	0.04921		mg/L		98	66 - 125	3	25
1,2,3-Trichlorobenzene	0.0500	0.05200		mg/L		104	75 - 137	2	25
1,2,4-Trichlorobenzene	0.0500	0.05159		mg/L		103	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.05351		mg/L		107	70 - 130	2	25
1,1,2-Trichloroethane	0.0500	0.04680		mg/L		94	70 - 130	1	25
Trichloroethene	0.0500	0.04976		mg/L		100	75 - 135	4	25
Trichlorofluoromethane	0.0500	0.05588		mg/L		112	60 - 140	5	25
1,2,3-Trichloropropane	0.0500	0.04833		mg/L		97	75 - 125	6	25
1,2,4-Trimethylbenzene	0.0500	0.05182		mg/L		104	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.05177		mg/L		104	60 - 140	1	25
Vinyl chloride	0.0500	0.04961		mg/L		99	60 - 140	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	102		75 - 131
1,2-Dichloroethane-d4 (Surr)	103		63 - 144
Toluene-d8 (Surr)	97		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-74729/3

Matrix: Water

Analysis Batch: 74729

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.0711	U	0.500	0.0711 mg/L			10/25/22 12:53	1
Chloride	<0.200	U	0.500	0.200 mg/L			10/25/22 12:53	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/25/22 12:53	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/25/22 12:53	1

Lab Sample ID: LCS 860-74729/4

Matrix: Water

Analysis Batch: 74729

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	10.0	9.589		mg/L		96	90 - 110
Chloride	10.0	9.957		mg/L		100	90 - 110
Fluoride	10.0	10.89		mg/L		109	90 - 110
Sulfate	10.0	9.896		mg/L		99	90 - 110

Lab Sample ID: LCSD 860-74729/5

Matrix: Water

Analysis Batch: 74729

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	10.0	9.590		mg/L		96	90 - 110	0	20
Chloride	10.0	9.981		mg/L		100	90 - 110	0	20
Fluoride	10.0	10.92		mg/L		109	90 - 110	0	20

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-74729/5

Matrix: Water

Analysis Batch: 74729

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	9.867		mg/L		99	90 - 110	0	20

Lab Sample ID: LLCS 860-74729/7

Matrix: Water

Analysis Batch: 74729

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	0.500	0.4948	J	mg/L		99	50 - 150
Chloride	0.500	0.4616	J	mg/L		92	50 - 150
Fluoride	0.500	0.5242		mg/L		105	50 - 150
Sulfate	0.500	0.5095		mg/L		102	50 - 150

Lab Sample ID: MB 860-74730/3

Matrix: Water

Analysis Batch: 74730

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			10/25/22 12:53	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/25/22 12:53	1

Lab Sample ID: LCS 860-74730/4

Matrix: Water

Analysis Batch: 74730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.867		mg/L		99	80 - 120
Nitrite as N	5.00	4.990		mg/L		100	80 - 120

Lab Sample ID: LCSD 860-74730/5

Matrix: Water

Analysis Batch: 74730

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	9.875		mg/L		99	80 - 120	0	20
Nitrite as N	5.00	5.011		mg/L		100	80 - 120	0	20

Lab Sample ID: LLCS 860-74730/6

Matrix: Water

Analysis Batch: 74730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.1116		mg/L		112	50 - 150
Nitrite as N	0.100	0.07295	J	mg/L		73	50 - 150

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-74181/1-A

Matrix: Water

Analysis Batch: 74318

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 74181

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		10/21/22 08:41	10/21/22 13:47	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		10/21/22 08:41	10/21/22 13:47	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		10/21/22 08:41	10/21/22 13:47	1
Sodium	<0.152	U	0.500	0.152 mg/L		10/21/22 08:41	10/21/22 13:47	1
SiO2	<0.471	U	1.07	0.471 mg/L		10/21/22 08:41	10/21/22 13:47	1

Lab Sample ID: LCS 860-74181/2-A

Matrix: Water

Analysis Batch: 74318

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 74181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	26.10		mg/L		104	85 - 115
Magnesium	25.0	25.60		mg/L		102	85 - 115
Potassium	10.0	10.20		mg/L		102	85 - 115
Sodium	25.0	25.60		mg/L		102	85 - 115
SiO2	21.4	22.04		mg/L		103	85 - 115

Lab Sample ID: LCSD 860-74181/3-A

Matrix: Water

Analysis Batch: 74318

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 74181

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	26.10		mg/L		104	85 - 115	0	20
Magnesium	25.0	25.70		mg/L		103	85 - 115	0	20
Potassium	10.0	10.20		mg/L		102	85 - 115	0	20
Sodium	25.0	25.70		mg/L		103	85 - 115	0	20
SiO2	21.4	22.04		mg/L		103	85 - 115	0	20

Lab Sample ID: LLCS 860-74181/4-A

Matrix: Water

Analysis Batch: 74318

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 74181

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.200	0.2640		mg/L		132	50 - 150
Magnesium	0.200	0.2030		mg/L		102	50 - 150
Potassium	0.500	0.4240	J	mg/L		85	50 - 150
Sodium	0.500	0.5280		mg/L		106	50 - 150
SiO2	1.07	1.168		mg/L		109	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-74219/4

Matrix: Water

Analysis Batch: 74219

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	4.00 mg/L			10/20/22 16:17	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/20/22 16:17	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/20/22 16:17	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			10/20/22 16:17	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 860-74219/4

Matrix: Water

Analysis Batch: 74219

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolphthalein Alkalinity	<4.00	U	4.00	mg/L			10/20/22 16:17	1

Lab Sample ID: LCS 860-74219/5

Matrix: Water

Analysis Batch: 74219

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	248.7		mg/L		99	85 - 115

Lab Sample ID: LCSD 860-74219/6

Matrix: Water

Analysis Batch: 74219

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	254.4		mg/L		102	85 - 115	2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-74044/1

Matrix: Water

Analysis Batch: 74044

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.00	U	5.00	mg/L			10/20/22 11:28	1

Lab Sample ID: LCS 860-74044/2

Matrix: Water

Analysis Batch: 74044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	990.0		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-74044/3

Matrix: Water

Analysis Batch: 74044

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	967.0		mg/L		97	80 - 120	2	10

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 73963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total/NA	Water	8260C	
MB 860-73963/9	Method Blank	Total/NA	Water	8260C	
LCS 860-73963/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-73963/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 74729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total/NA	Water	300.0	
MB 860-74729/3	Method Blank	Total/NA	Water	300.0	
LCS 860-74729/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-74729/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-74729/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 74730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total/NA	Water	300.0	
MB 860-74730/3	Method Blank	Total/NA	Water	300.0	
LCS 860-74730/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-74730/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-74730/6	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 74181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-74181/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-74181/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-74181/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-74181/4-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 74318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	74181
880-20549-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	74181
MB 860-74181/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	74181
LCS 860-74181/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	74181
LCSD 860-74181/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	74181
LLCS 860-74181/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	74181

General Chemistry

Analysis Batch: 74044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-74044/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-74044/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-74044/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 74123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 74219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-74219/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-74219/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-74219/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 74507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20549-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Client Sample ID: Levey Well
Date Collected: 10/19/22 11:45
Date Received: 10/19/22 16:00

Lab Sample ID: 880-20549-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	73963	NA	EET HOU	10/20/22 16:55
Total/NA	Analysis	300.0		5	74729	A1S	EET HOU	10/26/22 00:46
Total/NA	Analysis	300.0		1	74730	A1S	EET HOU	10/26/22 01:22
Total Recoverable	Prep	200.7			74181	AGR	EET HOU	10/21/22 08:41
Total Recoverable	Analysis	200.7 Rev 4.4		1	74318	JDM	EET HOU	10/21/22 14:42
Total Recoverable	Prep	200.7			74181	AGR	EET HOU	10/21/22 08:41
Total Recoverable	Analysis	200.7 Rev 4.4		50	74318	JDM	EET HOU	10/21/22 14:57
Total/NA	Analysis	SM 1030E		1	74507	SC	EET HOU	10/24/22 13:07
Total/NA	Analysis	SM 2320B		1	74219	TL	EET HOU	10/20/22 17:32
Total/NA	Analysis	SM 2540C		1	74044	BSR	EET HOU	10/20/22 11:28
Total/NA	Analysis	SM 4500 H+ B		1	74123	TL	EET HOU	10/20/22 16:20

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-47	06-30-23
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
200.7 Rev 4.4	200.7	Water	SiO2
SM 1030E		Water	Anion/Cation Balance
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity
SM 2320B		Water	Phenolphthalein Alkalinity
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	MCAWW	EET HOU
200.7 Rev 4.4	Metals (ICP)	EPA	EET HOU
SM 1030E	Cation Anion Balance	SM	EET HOU
SM 2320B	Alkalinity	SM	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
200.7	Preparation, Total Recoverable Metals	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20549-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20549-1	Levey Well	Water	10/19/22 11:45	10/19/22 16:00

- 1
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- 14



Chain of Custody

Work Order No: 20549

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3333
Midland, TX (432-704-5440) El Paso, TX (915)565-3443 Lubbock, TX (806)794-1296
Phoenix, AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa FL (813) 251-1111
Hobbs, NM (575-392-7550)

www.xenco.com Page 1 of 1

Project Manager:	Beaux Jennings		Bill to (if different)	
Company Name:	Ensolum LLC		Company Name:	
Address:	601 Marrenfeld #400		Address:	
City, State ZIP:	Midland TX 79701		City, State ZIP:	
Phone:	432-230-3344	Email:	bjennings@ensolum.com	

Work Order Comments	
Program: UST/PST	☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:	
Reporting Level II	☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐
Deliverables EDD	☐ ADAPT ☐ Other

Project Name:	Levey Well	Hobbs NM	Turn Around
Project Number:	03B1417001		Routine ☐
P.O. Number:	03B1417001		Rush 24 Hr
Sampler's Name:	Shane Diller		Due Date

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	3.4/3.3	Thermometer ID					
Received intact:	Yes No						
Cooler Custody Seals:	Yes No (N/A)	Correction Factor					
Sample Custody Seals:	Yes No (N/A)	Total Containers:					

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
Leyel Well	GW	10-19-22	1145	—

ANALYSIS REQUEST		Number of Containers
		VOCs
		Anions: F, Cl, SO4, B
		Cations: Ca, K, Mg, Na, Si
		pH
		Alkalinity
		TDS
Work Order Notes		TAT starts the day received by the lab, if received by 4:30pm Sample Comments

[illegible]

880-20549 Chain of Custody

Total 200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn
<i>Circle Method(s) and Metal(s) to be analyzed</i>		TCLP	/ SPLP	6010	8RCRA	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U											
		1631	/ 245.1	/ 7470	/ 7471	Hg																											

Notice: Signature of this document and relinquishment of samples constitute a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/19/20			

Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

 eurofins

**Environment Testing
America**

[illegible]

1211 W Florida Ave
Midland TX 79701
Phone: 432-704-5440

Chain of Custody Record

 eurofins

**Environment Testing
America**

[illegible]

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20549-1

SDG Number: Hobbs NM

Login Number: 20549

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20549-1

SDG Number: Hobbs NM

Login Number: 20549

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Houston

List Creation: 10/20/22 11:38 AM

Question	Answer	Comment
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-20869-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

11/2/2022 4:47:05 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

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results through



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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Laboratory Job ID: 880-20869-1

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Definitions/Glossary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

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: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Job ID: 880-20869-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-20869-1

Receipt

The samples were received on 10/27/2022 3:42 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.9°C

GC/MS VOA

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

GC Semi VOA

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

HPLC/IC

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

General Chemistry

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

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Client Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20869-1

Date Collected: 10/27/22 11:55

Matrix: Water

Date Received: 10/27/22 15:42

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/28/22 14:42	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/28/22 14:42	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/28/22 14:42	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/28/22 14:42	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/28/22 14:42	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/28/22 14:42	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/28/22 14:42	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/28/22 14:42	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/28/22 14:42	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/28/22 14:42	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/28/22 14:42	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/28/22 14:42	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/28/22 14:42	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/28/22 14:42	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/28/22 14:42	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/28/22 14:42	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/28/22 14:42	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 14:42	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/28/22 14:42	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/28/22 14:42	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 14:42	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 14:42	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/28/22 14:42	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/28/22 14:42	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/28/22 14:42	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/28/22 14:42	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/28/22 14:42	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/28/22 14:42	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/28/22 14:42	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/28/22 14:42	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/28/22 14:42	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/28/22 14:42	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/28/22 14:42	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/28/22 14:42	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/28/22 14:42	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/28/22 14:42	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/28/22 14:42	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 14:42	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/28/22 14:42	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/28/22 14:42	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/28/22 14:42	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/28/22 14:42	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/28/22 14:42	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/28/22 14:42	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 14:42	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/28/22 14:42	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/28/22 14:42	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/28/22 14:42	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/28/22 14:42	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20869-1

Date Collected: 10/27/22 11:55

Matrix: Water

Date Received: 10/27/22 15:42

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 14:42	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/28/22 14:42	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/28/22 14:42	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/28/22 14:42	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/28/22 14:42	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/28/22 14:42	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/28/22 14:42	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/28/22 14:42	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/28/22 14:42	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/28/22 14:42	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/28/22 14:42	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/28/22 14:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		74 - 124		10/28/22 14:42	1
Dibromofluoromethane (Surr)	98		75 - 131		10/28/22 14:42	1
1,2-Dichloroethane-d4 (Surr)	108		63 - 144		10/28/22 14:42	1
Toluene-d8 (Surr)	99		80 - 117		10/28/22 14:42	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<1.00	U	5.07	1.00 mg/L			10/31/22 11:47	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<1.00	U	5.07	1.00 mg/L		11/01/22 17:03	11/01/22 19:36	1
Diesel Range Organics (Over C10-C28)	<1.00	U	5.07	1.00 mg/L		11/01/22 17:03	11/01/22 19:36	1
Oil Range Organics (Over C28-C36)	<0.968	U	5.07	0.968 mg/L		11/01/22 17:03	11/01/22 19:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 135			11/01/22 17:03	11/01/22 19:36	1
o-Terphenyl	110		70 - 135			11/01/22 17:03	11/01/22 19:36	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.4		0.500	0.200 mg/L			10/29/22 05:32	1
Nitrate as N	0.0601	J	0.100	0.0391 mg/L			10/29/22 05:32	1
Fluoride	0.750		0.500	0.100 mg/L			10/29/22 05:32	1
Nitrite as N	0.423		0.100	0.0293 mg/L			10/29/22 05:32	1
Sulfate	29.8		0.500	0.109 mg/L			10/29/22 05:32	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	277		4.00	4.00 mg/L			10/31/22 14:44	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	277		4.00	4.00 mg/L			10/31/22 14:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/31/22 14:44	1
Carbon dioxide (SM 4500 CO2 D)	266			mg/L			10/31/22 11:06	1

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Client Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20869-1

Date Collected: 10/27/22 11:55

Matrix: Water

Date Received: 10/27/22 15:42

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide, Free (SM 4500 CO2 D)	22.0			mg/L			10/31/22 11:06	1
pH (SM 4500 H+ B)	7.4	HF		SU			10/31/22 12:17	1
Temperature (SM 4500 H+ B)	25.0	HF		Degrees C			10/31/22 12:17	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495 mg/L			10/28/22 17:35	1

Client Sample ID: MW-2

Lab Sample ID: 880-20869-2

Date Collected: 10/27/22 13:10

Matrix: Water

Date Received: 10/27/22 15:42

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0163		0.00100	0.000533 mg/L			10/28/22 15:01	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/28/22 15:01	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/28/22 15:01	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/28/22 15:01	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/28/22 15:01	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/28/22 15:01	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/28/22 15:01	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/28/22 15:01	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/28/22 15:01	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/28/22 15:01	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/28/22 15:01	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/28/22 15:01	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/28/22 15:01	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/28/22 15:01	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/28/22 15:01	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/28/22 15:01	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/28/22 15:01	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 15:01	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/28/22 15:01	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/28/22 15:01	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 15:01	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 15:01	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/28/22 15:01	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/28/22 15:01	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/28/22 15:01	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/28/22 15:01	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/28/22 15:01	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/28/22 15:01	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/28/22 15:01	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/28/22 15:01	1
Ethylbenzene	0.0186		0.00100	0.000411 mg/L			10/28/22 15:01	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/28/22 15:01	1
Isopropylbenzene	0.00687		0.00100	0.000613 mg/L			10/28/22 15:01	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/28/22 15:01	1
m,p-Xylenes	0.0934		0.0100	0.00124 mg/L			10/28/22 15:01	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/28/22 15:01	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/28/22 15:01	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 15:01	1

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Client Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-20869-2

Date Collected: 10/27/22 13:10

Matrix: Water

Date Received: 10/27/22 15:42

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	0.00218		0.00100	0.000498 mg/L			10/28/22 15:01	1
o-Xylene	0.0133		0.00100	0.000551 mg/L			10/28/22 15:01	1
p-Cymene (p-Isopropyltoluene)	0.00129		0.00100	0.000919 mg/L			10/28/22 15:01	1
sec-Butylbenzene	0.00140		0.00100	0.000468 mg/L			10/28/22 15:01	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/28/22 15:01	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/28/22 15:01	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 15:01	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/28/22 15:01	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/28/22 15:01	1
Toluene	0.00752		0.00100	0.000475 mg/L			10/28/22 15:01	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/28/22 15:01	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 15:01	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/28/22 15:01	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/28/22 15:01	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/28/22 15:01	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/28/22 15:01	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/28/22 15:01	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/28/22 15:01	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/28/22 15:01	1
1,2,4-Trimethylbenzene	0.0192		0.00100	0.000417 mg/L			10/28/22 15:01	1
1,3,5-Trimethylbenzene	0.00612		0.00100	0.000456 mg/L			10/28/22 15:01	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/28/22 15:01	1
Xylenes, Total	0.107		0.0100	0.00124 mg/L			10/28/22 15:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		10/28/22 15:01	1
Dibromofluoromethane (Surr)	94		75 - 131		10/28/22 15:01	1
1,2-Dichloroethane-d4 (Surr)	107		63 - 144		10/28/22 15:01	1
Toluene-d8 (Surr)	97		80 - 117		10/28/22 15:01	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.988	U	5.00	0.988 mg/L			10/31/22 11:47	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.988	U	5.00	0.988 mg/L		11/01/22 17:03	11/01/22 19:55	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		11/01/22 17:03	11/01/22 19:55	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		11/01/22 17:03	11/01/22 19:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 135			11/01/22 17:03	11/01/22 19:55	1
o-Terphenyl	106		70 - 135			11/01/22 17:03	11/01/22 19:55	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		0.500	0.200 mg/L			10/29/22 05:44	1
Nitrate as N	0.319		0.100	0.0391 mg/L			10/29/22 05:44	1
Fluoride	0.165	J	0.500	0.100 mg/L			10/29/22 05:44	1

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Client Sample Results

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Client Sample ID: MW-2
Date Collected: 10/27/22 13:10
Date Received: 10/27/22 15:42

Lab Sample ID: 880-20869-2
Matrix: Water

Method: MCAWW 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.871		0.100	0.0293	mg/L			10/29/22 05:44	1
Sulfate	104		0.500	0.109	mg/L			10/29/22 05:44	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	1340		4.00	4.00	mg/L			10/31/22 15:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	1340		4.00	4.00	mg/L			10/31/22 15:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/31/22 15:17	1
Carbon dioxide (SM 4500 CO2 D)	2530				mg/L			10/31/22 11:06	1
Carbon Dioxide, Free (SM 4500 CO2 D)	1350				mg/L			10/31/22 11:06	1
pH (SM 4500 H+ B)	6.3	HF			SU			10/31/22 12:18	1
Temperature (SM 4500 H+ B)	25.0	HF			Degrees C			10/31/22 12:18	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495	mg/L			10/28/22 17:35	1

Surrogate Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Method: 8260C - Volatile Organic Compounds by GC/MS
Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
860-35795-G-8 MS	Matrix Spike	103	96	93	98
880-20869-1	MW-1	103	98	108	99
880-20869-2	MW-2	100	94	107	97
LCS 860-75192/3	Lab Control Sample	103	97	93	97
LCSD 860-75192/4	Lab Control Sample Dup	104	91	94	99
MB 860-75192/10	Method Blank	102	92	102	98
Surrogate Legend					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
DCA = 1,2-Dichloroethane-d4 (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8015B NM - Diesel Range Organics (DRO) (GC)
Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-135)	OTPH1 (70-135)
880-20869-1	MW-1	95	110
880-20869-2	MW-2	91	106
LCS 860-75760/2-A	Lab Control Sample	90	105
LCSD 860-75760/3-A	Lab Control Sample Dup	85	107
MB 860-75760/1-A	Method Blank	93	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-75192/10

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/28/22 12:11	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/28/22 12:11	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/28/22 12:11	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/28/22 12:11	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/28/22 12:11	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/28/22 12:11	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/28/22 12:11	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/28/22 12:11	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/28/22 12:11	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/28/22 12:11	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/28/22 12:11	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/28/22 12:11	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/28/22 12:11	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/28/22 12:11	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/28/22 12:11	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/28/22 12:11	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/28/22 12:11	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 12:11	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/28/22 12:11	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/28/22 12:11	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 12:11	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 12:11	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/28/22 12:11	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/28/22 12:11	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/28/22 12:11	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/28/22 12:11	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/28/22 12:11	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/28/22 12:11	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/28/22 12:11	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/28/22 12:11	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/28/22 12:11	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/28/22 12:11	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/28/22 12:11	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/28/22 12:11	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/28/22 12:11	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/28/22 12:11	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/28/22 12:11	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 12:11	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/28/22 12:11	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/28/22 12:11	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/28/22 12:11	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/28/22 12:11	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/28/22 12:11	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/28/22 12:11	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 12:11	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/28/22 12:11	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/28/22 12:11	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/28/22 12:11	1

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-75192/10

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/28/22 12:11	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 12:11	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/28/22 12:11	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/28/22 12:11	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/28/22 12:11	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/28/22 12:11	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/28/22 12:11	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/28/22 12:11	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/28/22 12:11	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/28/22 12:11	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/28/22 12:11	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/28/22 12:11	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/28/22 12:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		10/28/22 12:11	1
Dibromofluoromethane (Surr)	92		75 - 131		10/28/22 12:11	1
1,2-Dichloroethane-d4 (Surr)	102		63 - 144		10/28/22 12:11	1
Toluene-d8 (Surr)	98		80 - 117		10/28/22 12:11	1

Lab Sample ID: LCS 860-75192/3

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05373		mg/L		107	75 - 125
Bromobenzene	0.0500	0.05320		mg/L		106	75 - 125
Bromochloromethane	0.0500	0.05418		mg/L		108	60 - 140
Bromodichloromethane	0.0500	0.04951		mg/L		99	75 - 125
Bromoform	0.0500	0.05123		mg/L		102	70 - 130
Bromomethane	0.0500	0.03656		mg/L		73	60 - 140
2-Butanone	0.250	0.2474		mg/L		99	60 - 140
Carbon tetrachloride	0.0500	0.05526		mg/L		111	70 - 130
Chlorobenzene	0.0500	0.05192		mg/L		104	65 - 135
Chloroethane	0.0500	0.04826		mg/L		97	60 - 140
Chloroform	0.0500	0.05327		mg/L		107	70 - 121
Chloromethane	0.0500	0.04679		mg/L		94	60 - 140
2-Chlorotoluene	0.0500	0.05445		mg/L		109	73 - 125
4-Chlorotoluene	0.0500	0.05439		mg/L		109	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05386		mg/L		108	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04958		mg/L		99	74 - 125
Dibromochloromethane	0.0500	0.05016		mg/L		100	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04703		mg/L		94	59 - 125
1,2-Dibromoethane	0.0500	0.05454		mg/L		109	73 - 125
1,2-Dichlorobenzene	0.0500	0.05221		mg/L		104	75 - 125
1,3-Dichlorobenzene	0.0500	0.05424		mg/L		108	75 - 125
1,4-Dichlorobenzene	0.0500	0.05082		mg/L		102	75 - 125
Dichlorodifluoromethane	0.0500	0.06093		mg/L		122	70 - 130

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-75192/3

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.05873		mg/L		117	70 - 130
1,2-Dichloroethane	0.0500	0.05346		mg/L		107	72 - 130
1,1-Dichloroethene	0.0500	0.04946		mg/L		99	50 - 150
1,2-Dichloropropane	0.0500	0.05495		mg/L		110	74 - 125
1,3-Dichloropropane	0.0500	0.05125		mg/L		103	75 - 125
2,2-Dichloropropane	0.0500	0.05227		mg/L		105	75 - 125
1,1-Dichloropropene	0.0500	0.05629		mg/L		113	75 - 125
Ethylbenzene	0.0500	0.05561		mg/L		111	75 - 125
Hexachlorobutadiene	0.0500	0.05361		mg/L		107	75 - 125
Isopropylbenzene	0.0500	0.05151		mg/L		103	75 - 125
Methylene Chloride	0.0500	0.04760		mg/L		95	75 - 125
m,p-Xylenes	0.0500	0.05629		mg/L		113	75 - 125
MTBE	0.0500	0.05408		mg/L		108	65 - 135
Naphthalene	0.0500	0.05348		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05165		mg/L		103	75 - 125
N-Propylbenzene	0.0500	0.05308		mg/L		106	75 - 125
o-Xylene	0.0500	0.05048		mg/L		101	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05273		mg/L		105	75 - 125
sec-Butylbenzene	0.0500	0.05314		mg/L		106	75 - 125
Styrene	0.0500	0.04633		mg/L		93	75 - 125
tert-Butylbenzene	0.0500	0.05286		mg/L		106	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05014		mg/L		100	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05156		mg/L		103	74 - 125
Tetrachloroethene	0.0500	0.05712		mg/L		114	71 - 125
Toluene	0.0500	0.05326		mg/L		107	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04666		mg/L		93	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05129		mg/L		103	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05252		mg/L		105	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05067		mg/L		101	75 - 135
1,1,1-Trichloroethane	0.0500	0.05067		mg/L		101	70 - 130
1,1,2-Trichloroethane	0.0500	0.05175		mg/L		103	70 - 130
Trichloroethene	0.0500	0.05013		mg/L		100	75 - 135
Trichlorofluoromethane	0.0500	0.05413		mg/L		108	60 - 140
1,2,3-Trichloropropane	0.0500	0.04987		mg/L		100	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05139		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05726		mg/L		115	60 - 140
Vinyl chloride	0.0500	0.05304		mg/L		106	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	97		75 - 131
1,2-Dichloroethane-d4 (Surr)	93		63 - 144
Toluene-d8 (Surr)	97		80 - 117

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-75192/4

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.05082		mg/L		102	75 - 125	6	25
Bromobenzene	0.0500	0.05429		mg/L		109	75 - 125	2	25
Bromochloromethane	0.0500	0.04970		mg/L		99	60 - 140	9	25
Bromodichloromethane	0.0500	0.04754		mg/L		95	75 - 125	4	25
Bromoform	0.0500	0.05054		mg/L		101	70 - 130	1	25
Bromomethane	0.0500	0.03769		mg/L		75	60 - 140	3	25
2-Butanone	0.250	0.2310		mg/L		92	60 - 140	7	25
Carbon tetrachloride	0.0500	0.05450		mg/L		109	70 - 130	1	25
Chlorobenzene	0.0500	0.05149		mg/L		103	65 - 135	1	25
Chloroethane	0.0500	0.04432		mg/L		89	60 - 140	9	25
Chloroform	0.0500	0.05026		mg/L		101	70 - 121	6	25
Chloromethane	0.0500	0.04333		mg/L		87	60 - 140	8	25
2-Chlorotoluene	0.0500	0.05500		mg/L		110	73 - 125	1	25
4-Chlorotoluene	0.0500	0.05479		mg/L		110	74 - 125	1	25
cis-1,2-Dichloroethene	0.0500	0.05075		mg/L		102	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.04782		mg/L		96	74 - 125	4	25
Dibromochloromethane	0.0500	0.04956		mg/L		99	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04821		mg/L		96	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.05434		mg/L		109	73 - 125	0	25
1,2-Dichlorobenzene	0.0500	0.05295		mg/L		106	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.05483		mg/L		110	75 - 125	1	25
1,4-Dichlorobenzene	0.0500	0.05170		mg/L		103	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.05549		mg/L		111	70 - 130	9	25
1,1-Dichloroethane	0.0500	0.05044		mg/L		101	70 - 130	15	25
1,2-Dichloroethane	0.0500	0.05137		mg/L		103	72 - 130	4	25
1,1-Dichloroethene	0.0500	0.04499		mg/L		90	50 - 150	9	25
1,2-Dichloropropane	0.0500	0.05215		mg/L		104	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.05079		mg/L		102	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.04837		mg/L		97	75 - 125	8	25
1,1-Dichloropropene	0.0500	0.05308		mg/L		106	75 - 125	6	25
Ethylbenzene	0.0500	0.05482		mg/L		110	75 - 125	1	25
Hexachlorobutadiene	0.0500	0.05398		mg/L		108	75 - 125	1	25
Isopropylbenzene	0.0500	0.05105		mg/L		102	75 - 125	1	25
Methylene Chloride	0.0500	0.04443		mg/L		89	75 - 125	7	25
m,p-Xylenes	0.0500	0.05503		mg/L		110	75 - 125	2	25
MTBE	0.0500	0.05376		mg/L		108	65 - 135	1	25
Naphthalene	0.0500	0.05645		mg/L		113	70 - 130	5	25
n-Butylbenzene	0.0500	0.05168		mg/L		103	75 - 125	0	25
N-Propylbenzene	0.0500	0.05353		mg/L		107	75 - 125	1	25
o-Xylene	0.0500	0.04988		mg/L		100	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05270		mg/L		105	75 - 125	0	25
sec-Butylbenzene	0.0500	0.05368		mg/L		107	75 - 125	1	25
Styrene	0.0500	0.04587		mg/L		92	75 - 125	1	25
tert-Butylbenzene	0.0500	0.05329		mg/L		107	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.04949		mg/L		99	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.05201		mg/L		104	74 - 125	1	25
Tetrachloroethene	0.0500	0.05664		mg/L		113	71 - 125	1	25
Toluene	0.0500	0.05229		mg/L		105	70 - 130	2	25

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-75192/4

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.0500	0.04499		mg/L		90	75 - 125	4	25
trans-1,3-Dichloropropene	0.0500	0.05088		mg/L		102	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.05657		mg/L		113	75 - 137	7	25
1,2,4-Trichlorobenzene	0.0500	0.05239		mg/L		105	75 - 135	3	25
1,1,1-Trichloroethane	0.0500	0.04766		mg/L		95	70 - 130	6	25
1,1,2-Trichloroethane	0.0500	0.05074		mg/L		101	70 - 130	2	25
Trichloroethene	0.0500	0.04757		mg/L		95	75 - 135	5	25
Trichlorofluoromethane	0.0500	0.05259		mg/L		105	60 - 140	3	25
1,2,3-Trichloropropane	0.0500	0.04998		mg/L		100	75 - 125	0	25
1,2,4-Trimethylbenzene	0.0500	0.05211		mg/L		104	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.05788		mg/L		116	60 - 140	1	25
Vinyl chloride	0.0500	0.05042		mg/L		101	60 - 140	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	104		74 - 124
Dibromofluoromethane (Surr)	91		75 - 131
1,2-Dichloroethane-d4 (Surr)	94		63 - 144
Toluene-d8 (Surr)	99		80 - 117

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 860-75760/1-A

Matrix: Water

Analysis Batch: 75643

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75760

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.988	U	5.00	0.988 mg/L		11/01/22 17:03	11/01/22 19:17	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		11/01/22 17:03	11/01/22 19:17	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		11/01/22 17:03	11/01/22 19:17	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 135	11/01/22 17:03	11/01/22 19:17	1
o-Terphenyl	109		70 - 135	11/01/22 17:03	11/01/22 19:17	1

Lab Sample ID: LCS 860-75760/2-A

Matrix: Water

Analysis Batch: 75643

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 75760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.9	117.6		mg/L		118	70 - 135
Diesel Range Organics (Over C10-C28)	99.7	100.3		mg/L		101	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
1-Chlorooctane	90		70 - 135
o-Terphenyl	105		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: LCSD 860-75760/3-A

Matrix: Water

Analysis Batch: 75643

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 75760

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.9	115.1		mg/L		115	70 - 135	2	35
Diesel Range Organics (Over C10-C28)	99.7	99.55		mg/L		100	70 - 135	1	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 135						
o-Terphenyl	107		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-75322/3

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			10/29/22 00:39	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/29/22 00:39	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/29/22 00:39	1

Lab Sample ID: LCS 860-75322/4

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.842		mg/L		98	90 - 110
Fluoride	10.0	10.66		mg/L		107	90 - 110
Sulfate	10.0	9.683		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-75322/5

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	9.878		mg/L		99	90 - 110	0	20
Fluoride	10.0	10.72		mg/L		107	90 - 110	1	20
Sulfate	10.0	9.719		mg/L		97	90 - 110	0	20

Lab Sample ID: LLCS 860-75322/7

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.4485	J	mg/L		90	50 - 150
Fluoride	0.500	0.5105		mg/L		102	50 - 150
Sulfate	0.500	0.4967	J	mg/L		99	50 - 150

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QC Sample Results

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-75323/3

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			10/29/22 00:39	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/29/22 00:39	1

Lab Sample ID: LCS 860-75323/4

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.696		mg/L		97	80 - 120
Nitrite as N	5.00	4.974		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-75323/5

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	9.723		mg/L		97	80 - 120	0	20
Nitrite as N	5.00	4.990		mg/L		100	80 - 120	0	20

Lab Sample ID: LLCs 860-75323/6

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.1133		mg/L		113	50 - 150
Nitrite as N	0.100	0.07206	J	mg/L		72	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-75572/4

Matrix: Water

Analysis Batch: 75572

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1

Lab Sample ID: LCS 860-75572/5

Matrix: Water

Analysis Batch: 75572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	253.0		mg/L		101	85 - 115

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QC Sample Results

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-75572/6
Matrix: Water
Analysis Batch: 75572

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	252.6		mg/L		101	85 - 115	0	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-75314/1
Matrix: Water
Analysis Batch: 75314

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.495	U	5.00	0.495 mg/L			10/28/22 17:35	1

Lab Sample ID: LCS 860-75314/2
Matrix: Water
Analysis Batch: 75314

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	50.0	45.20		mg/L		90	80 - 120

Lab Sample ID: LCSD 860-75314/3
Matrix: Water
Analysis Batch: 75314

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	50.0	45.80		mg/L		92	80 - 120	1	20

QC Association Summary

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 75192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	8260C	
880-20869-2	MW-2	Total/NA	Water	8260C	
MB 860-75192/10	Method Blank	Total/NA	Water	8260C	
LCS 860-75192/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-75192/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 74892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	8015 NM	
880-20869-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 75643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	8015B NM	75760
880-20869-2	MW-2	Total/NA	Water	8015B NM	75760
MB 860-75760/1-A	Method Blank	Total/NA	Water	8015B NM	75760
LCS 860-75760/2-A	Lab Control Sample	Total/NA	Water	8015B NM	75760
LCSD 860-75760/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	75760

Prep Batch: 75760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-20869-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-75760/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-75760/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-75760/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 75322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	300.0	
880-20869-2	MW-2	Total/NA	Water	300.0	
MB 860-75322/3	Method Blank	Total/NA	Water	300.0	
LCS 860-75322/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-75322/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-75322/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 75323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	300.0	
880-20869-2	MW-2	Total/NA	Water	300.0	
MB 860-75323/3	Method Blank	Total/NA	Water	300.0	
LCS 860-75323/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-75323/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-75323/6	Lab Control Sample	Total/NA	Water	300.0	

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QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

General Chemistry

Analysis Batch: 75314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-20869-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-75314/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-75314/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-75314/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 75470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-20869-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Analysis Batch: 75501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-20869-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 75572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20869-1	MW-1	Total/NA	Water	SM 2320B	
880-20869-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-75572/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-75572/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-75572/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Ensolum

Job ID: 880-20869-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-20869-1

Date Collected: 10/27/22 11:55

Matrix: Water

Date Received: 10/27/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	75192	AN	EET HOU	10/28/22 14:42
Total/NA	Analysis	8015 NM		1	74892	MC	EET HOU	10/31/22 11:47
Total/NA	Prep	8015NM Aq Prep			75760	SAR	EET HOU	11/01/22 17:03
Total/NA	Analysis	8015B NM		1	75643	T1S	EET HOU	11/01/22 19:36
Total/NA	Analysis	300.0		1	75322	W1N	EET HOU	10/29/22 05:32
Total/NA	Analysis	300.0		1	75323	W1N	EET HOU	10/29/22 05:32
Total/NA	Analysis	SM 2320B		1	75572	TL	EET HOU	10/31/22 14:44
Total/NA	Analysis	SM 4500 CO2 D		1	75470	SC	EET HOU	10/31/22 11:06
Total/NA	Analysis	SM 4500 H+ B		1	75501	TL	EET HOU	10/31/22 12:17
Total/NA	Analysis	SM 4500 S2 F		1	75314	SCI	EET HOU	10/28/22 17:35

Client Sample ID: MW-2

Lab Sample ID: 880-20869-2

Date Collected: 10/27/22 13:10

Matrix: Water

Date Received: 10/27/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	75192	AN	EET HOU	10/28/22 15:01
Total/NA	Analysis	8015 NM		1	74892	MC	EET HOU	10/31/22 11:47
Total/NA	Prep	8015NM Aq Prep			75760	SAR	EET HOU	11/01/22 17:03
Total/NA	Analysis	8015B NM		1	75643	T1S	EET HOU	11/01/22 19:55
Total/NA	Analysis	300.0		1	75322	W1N	EET HOU	10/29/22 05:44
Total/NA	Analysis	300.0		1	75323	W1N	EET HOU	10/29/22 05:44
Total/NA	Analysis	SM 2320B		1	75572	TL	EET HOU	10/31/22 15:17
Total/NA	Analysis	SM 4500 CO2 D		1	75470	SC	EET HOU	10/31/22 11:06
Total/NA	Analysis	SM 4500 H+ B		1	75501	TL	EET HOU	10/31/22 12:18
Total/NA	Analysis	SM 4500 S2 F		1	75314	SCI	EET HOU	10/28/22 17:35

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-47	06-30-23

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
8015 NM		Water	Total TPH
8015B NM	8015NM Aq Prep	Water	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Aq Prep	Water	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Aq Prep	Water	Oil Range Organics (Over C28-C36)
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 4500 CO2 D		Water	Carbon dioxide
SM 4500 CO2 D		Water	Carbon Dioxide, Free
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	MCAWW	EET HOU
SM 2320B	Alkalinity	SM	EET HOU
SM 4500 CO2 D	Carbon Dioxide and Forms of Alkalinity by Calculation	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
SM 4500 S2 F	Sulfide, Total	SM	EET HOU
5030C	Purge and Trap	SW846	EET HOU
8015NM Aq Prep	Microextraction	SW846	EET HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Ensolum
Project/Site: South Hobbs - 03B1417002

Job ID: 880-20869-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20869-1	MW-1	Water	10/27/22 11:55	10/27/22 15:42
880-20869-2	MW-2	Water	10/27/22 13:10	10/27/22 15:42

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Environment Test rig



Chain of Custody Record

[illegible]

Ver- 06/08/2021

Corrected Temp: 27

1

1

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20869-1

Login Number: 20869

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20869-1

Login Number: 20869

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Houston

List Creation: 10/28/22 12:25 PM

Question	Answer	Comment
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-20870-1

Laboratory Sample Delivery Group: Hobbs NM

Client Project/Site: Levey Well Hobbs, NM - 03B1417001

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

11/1/2022 8:46:24 AM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Laboratory Job ID: 880-20870-1
SDG: Hobbs NM

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Definitions/Glossary

Client: Ensolum

Job ID: 880-20870-1

Project/Site: Levey Well Hobbs, NM - 03B1417001

SDG: Hobbs NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Eurofins Midland

Definitions/Glossary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

- 1
- 2
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Case Narrative

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Job ID: 880-20870-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-20870-1

Receipt

The sample was received on 10/27/2022 3:42 PM. 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 4.9°C

GC/MS VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Chloride analytical batch 860-75322 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Nitrite as N analytical batch 860-75323 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Metals

Method 200.7: Due to the high concentration of Calcium and Sodium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-75386 and analytical batch 860-75571 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

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

General Chemistry

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

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Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-20870-1

Date Collected: 10/27/22 11:20

Matrix: Water

Date Received: 10/27/22 15:42

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00341		0.00100	0.000533 mg/L			10/28/22 15:20	1
Bromobenzene	<0.000665 U		0.00100	0.000665 mg/L			10/28/22 15:20	1
Bromochloromethane	<0.000657 U		0.00100	0.000657 mg/L			10/28/22 15:20	1
Bromodichloromethane	<0.000552 U		0.00100	0.000552 mg/L			10/28/22 15:20	1
Bromoform	<0.000633 U		0.00500	0.000633 mg/L			10/28/22 15:20	1
Bromomethane	<0.00142 U		0.00500	0.00142 mg/L			10/28/22 15:20	1
2-Butanone	<0.00828 U		0.0500	0.00828 mg/L			10/28/22 15:20	1
Carbon tetrachloride	<0.000896 U		0.00500	0.000896 mg/L			10/28/22 15:20	1
Chlorobenzene	<0.000530 U		0.00100	0.000530 mg/L			10/28/22 15:20	1
Chloroethane	<0.00198 U		0.0100	0.00198 mg/L			10/28/22 15:20	1
Chloroform	<0.000643 U		0.00100	0.000643 mg/L			10/28/22 15:20	1
Chloromethane	<0.00204 U		0.0100	0.00204 mg/L			10/28/22 15:20	1
2-Chlorotoluene	<0.00118 U		0.00200	0.00118 mg/L			10/28/22 15:20	1
4-Chlorotoluene	<0.000472 U		0.00100	0.000472 mg/L			10/28/22 15:20	1
cis-1,2-Dichloroethene	<0.000714 U		0.00100	0.000714 mg/L			10/28/22 15:20	1
cis-1,3-Dichloropropene	<0.00107 U		0.00500	0.00107 mg/L			10/28/22 15:20	1
Dibromochloromethane	<0.000547 U		0.00500	0.000547 mg/L			10/28/22 15:20	1
1,2-Dibromo-3-Chloropropane	<0.00127 U		0.00500	0.00127 mg/L			10/28/22 15:20	1
1,2-Dibromoethane	<0.000999 U		0.00500	0.000999 mg/L			10/28/22 15:20	1
1,2-Dichlorobenzene	<0.000509 U		0.00100	0.000509 mg/L			10/28/22 15:20	1
1,3-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			10/28/22 15:20	1
1,4-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			10/28/22 15:20	1
Dichlorodifluoromethane	<0.000919 U		0.00100	0.000919 mg/L			10/28/22 15:20	1
1,1-Dichloroethane	<0.000635 U		0.00100	0.000635 mg/L			10/28/22 15:20	1
1,2-Dichloroethane	<0.000590 U		0.00100	0.000590 mg/L			10/28/22 15:20	1
1,1-Dichloroethene	<0.000738 U		0.00100	0.000738 mg/L			10/28/22 15:20	1
1,2-Dichloropropane	<0.000667 U		0.00500	0.000667 mg/L			10/28/22 15:20	1
1,3-Dichloropropane	<0.000514 U		0.00500	0.000514 mg/L			10/28/22 15:20	1
2,2-Dichloropropane	<0.000780 U		0.00500	0.000780 mg/L			10/28/22 15:20	1
1,1-Dichloropropene	<0.00160 U		0.00500	0.00160 mg/L			10/28/22 15:20	1
Ethylbenzene	0.0136		0.00100	0.000411 mg/L			10/28/22 15:20	1
Hexachlorobutadiene	<0.00126 U		0.00500	0.00126 mg/L			10/28/22 15:20	1
Isopropylbenzene	0.00646		0.00100	0.000613 mg/L			10/28/22 15:20	1
Methylene Chloride	<0.00173 U		0.00500	0.00173 mg/L			10/28/22 15:20	1
m,p-Xylenes	0.0556		0.0100	0.00124 mg/L			10/28/22 15:20	1
MTBE	<0.00139 U		0.00500	0.00139 mg/L			10/28/22 15:20	1
Naphthalene	<0.00135 U		0.0100	0.00135 mg/L			10/28/22 15:20	1
n-Butylbenzene	<0.000644 U		0.00100	0.000644 mg/L			10/28/22 15:20	1
N-Propylbenzene	0.00336		0.00100	0.000498 mg/L			10/28/22 15:20	1
o-Xylene	0.00861		0.00100	0.000551 mg/L			10/28/22 15:20	1
p-Cymene (p-Isopropyltoluene)	0.00150		0.00100	0.000919 mg/L			10/28/22 15:20	1
sec-Butylbenzene	0.00185		0.00100	0.000468 mg/L			10/28/22 15:20	1
Styrene	<0.000655 U		0.00100	0.000655 mg/L			10/28/22 15:20	1
tert-Butylbenzene	<0.000442 U		0.00100	0.000442 mg/L			10/28/22 15:20	1
1,1,1,2-Tetrachloroethane	<0.000644 U		0.00100	0.000644 mg/L			10/28/22 15:20	1
1,1,2,2-Tetrachloroethane	<0.000470 U		0.00100	0.000470 mg/L			10/28/22 15:20	1
Tetrachloroethene	<0.000801 U		0.00100	0.000801 mg/L			10/28/22 15:20	1
Toluene	0.0282		0.00100	0.000475 mg/L			10/28/22 15:20	1
trans-1,2-Dichloroethene	<0.000945 U		0.00100	0.000945 mg/L			10/28/22 15:20	1

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Client Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-20870-1

Date Collected: 10/27/22 11:20

Matrix: Water

Date Received: 10/27/22 15:42

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 15:20	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/28/22 15:20	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/28/22 15:20	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/28/22 15:20	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/28/22 15:20	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/28/22 15:20	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/28/22 15:20	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/28/22 15:20	1
1,2,4-Trimethylbenzene	0.0143		0.00100	0.000417 mg/L			10/28/22 15:20	1
1,3,5-Trimethylbenzene	0.00503		0.00100	0.000456 mg/L			10/28/22 15:20	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/28/22 15:20	1
Xylenes, Total	0.0642		0.0100	0.00124 mg/L			10/28/22 15:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		74 - 124		10/28/22 15:20	1
Dibromofluoromethane (Surr)	96		75 - 131		10/28/22 15:20	1
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		10/28/22 15:20	1
Toluene-d8 (Surr)	104		80 - 117		10/28/22 15:20	1

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.412	J	0.500	0.0711 mg/L			10/29/22 10:25	1
Nitrate as N	0.0757	J	0.100	0.0391 mg/L			10/29/22 10:25	1
Chloride	201		0.500	0.200 mg/L			10/29/22 10:25	1
Nitrite as N	0.690	F1	0.100	0.0293 mg/L			10/29/22 10:25	1
Fluoride	0.631		0.500	0.100 mg/L			10/29/22 10:25	1
Sulfate	40.1		0.500	0.109 mg/L			10/29/22 10:25	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	322		10.0	5.76 mg/L		10/30/22 12:00	10/31/22 11:34	50
Magnesium	64.8		0.200	0.0428 mg/L		10/30/22 12:00	10/31/22 11:27	1
Potassium	5.47		0.500	0.0914 mg/L		10/30/22 12:00	10/31/22 11:27	1
Sodium	95.2		0.500	0.152 mg/L		10/30/22 12:00	10/31/22 11:27	1
SiO2	76.6		1.07	0.471 mg/L		10/30/22 12:00	10/31/22 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	3.53			%			11/01/22 08:19	1
Alkalinity (SM 2320B)	740		4.00	4.00 mg/L			10/31/22 15:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	740		4.00	4.00 mg/L			10/31/22 15:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/31/22 15:28	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/31/22 15:28	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			10/31/22 15:28	1
Total Dissolved Solids (SM 2540C)	977		10.0	10.0 mg/L			10/28/22 11:31	1
pH (SM 4500 H+ B)	6.4	HF		SU			10/31/22 12:20	1
Temperature (SM 4500 H+ B)	25.0	HF		Degrees C			10/31/22 12:20	1

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Surrogate Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS
Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
860-35795-G-8 MS	Matrix Spike	103	96	93	98
880-20870-1	Levey Well	108	96	105	104
LCS 860-75192/3	Lab Control Sample	103	97	93	97
LCSD 860-75192/4	Lab Control Sample Dup	104	91	94	99
MB 860-75192/10	Method Blank	102	92	102	98
Surrogate Legend					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
DCA = 1,2-Dichloroethane-d4 (Surr)					
TOL = Toluene-d8 (Surr)					

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-75192/10

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000533	U	0.00100	0.000533 mg/L			10/28/22 12:11	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			10/28/22 12:11	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			10/28/22 12:11	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			10/28/22 12:11	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			10/28/22 12:11	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			10/28/22 12:11	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			10/28/22 12:11	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			10/28/22 12:11	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			10/28/22 12:11	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			10/28/22 12:11	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			10/28/22 12:11	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			10/28/22 12:11	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			10/28/22 12:11	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			10/28/22 12:11	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			10/28/22 12:11	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			10/28/22 12:11	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			10/28/22 12:11	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 12:11	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			10/28/22 12:11	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			10/28/22 12:11	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 12:11	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			10/28/22 12:11	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			10/28/22 12:11	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			10/28/22 12:11	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			10/28/22 12:11	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			10/28/22 12:11	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			10/28/22 12:11	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			10/28/22 12:11	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			10/28/22 12:11	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			10/28/22 12:11	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			10/28/22 12:11	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			10/28/22 12:11	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			10/28/22 12:11	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			10/28/22 12:11	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			10/28/22 12:11	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			10/28/22 12:11	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			10/28/22 12:11	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 12:11	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			10/28/22 12:11	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			10/28/22 12:11	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			10/28/22 12:11	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			10/28/22 12:11	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			10/28/22 12:11	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			10/28/22 12:11	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			10/28/22 12:11	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			10/28/22 12:11	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			10/28/22 12:11	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			10/28/22 12:11	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-75192/10

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			10/28/22 12:11	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			10/28/22 12:11	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			10/28/22 12:11	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			10/28/22 12:11	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			10/28/22 12:11	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			10/28/22 12:11	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			10/28/22 12:11	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			10/28/22 12:11	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			10/28/22 12:11	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			10/28/22 12:11	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			10/28/22 12:11	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			10/28/22 12:11	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			10/28/22 12:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		10/28/22 12:11	1
Dibromofluoromethane (Surr)	92		75 - 131		10/28/22 12:11	1
1,2-Dichloroethane-d4 (Surr)	102		63 - 144		10/28/22 12:11	1
Toluene-d8 (Surr)	98		80 - 117		10/28/22 12:11	1

Lab Sample ID: LCS 860-75192/3

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05373		mg/L		107	75 - 125
Bromobenzene	0.0500	0.05320		mg/L		106	75 - 125
Bromochloromethane	0.0500	0.05418		mg/L		108	60 - 140
Bromodichloromethane	0.0500	0.04951		mg/L		99	75 - 125
Bromoform	0.0500	0.05123		mg/L		102	70 - 130
Bromomethane	0.0500	0.03656		mg/L		73	60 - 140
2-Butanone	0.250	0.2474		mg/L		99	60 - 140
Carbon tetrachloride	0.0500	0.05526		mg/L		111	70 - 130
Chlorobenzene	0.0500	0.05192		mg/L		104	65 - 135
Chloroethane	0.0500	0.04826		mg/L		97	60 - 140
Chloroform	0.0500	0.05327		mg/L		107	70 - 121
Chloromethane	0.0500	0.04679		mg/L		94	60 - 140
2-Chlorotoluene	0.0500	0.05445		mg/L		109	73 - 125
4-Chlorotoluene	0.0500	0.05439		mg/L		109	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05386		mg/L		108	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04958		mg/L		99	74 - 125
Dibromochloromethane	0.0500	0.05016		mg/L		100	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04703		mg/L		94	59 - 125
1,2-Dibromoethane	0.0500	0.05454		mg/L		109	73 - 125
1,2-Dichlorobenzene	0.0500	0.05221		mg/L		104	75 - 125
1,3-Dichlorobenzene	0.0500	0.05424		mg/L		108	75 - 125
1,4-Dichlorobenzene	0.0500	0.05082		mg/L		102	75 - 125
Dichlorodifluoromethane	0.0500	0.06093		mg/L		122	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-75192/3

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.05873		mg/L		117	70 - 130
1,2-Dichloroethane	0.0500	0.05346		mg/L		107	72 - 130
1,1-Dichloroethene	0.0500	0.04946		mg/L		99	50 - 150
1,2-Dichloropropane	0.0500	0.05495		mg/L		110	74 - 125
1,3-Dichloropropane	0.0500	0.05125		mg/L		103	75 - 125
2,2-Dichloropropane	0.0500	0.05227		mg/L		105	75 - 125
1,1-Dichloropropene	0.0500	0.05629		mg/L		113	75 - 125
Ethylbenzene	0.0500	0.05561		mg/L		111	75 - 125
Hexachlorobutadiene	0.0500	0.05361		mg/L		107	75 - 125
Isopropylbenzene	0.0500	0.05151		mg/L		103	75 - 125
Methylene Chloride	0.0500	0.04760		mg/L		95	75 - 125
m,p-Xylenes	0.0500	0.05629		mg/L		113	75 - 125
MTBE	0.0500	0.05408		mg/L		108	65 - 135
Naphthalene	0.0500	0.05348		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05165		mg/L		103	75 - 125
N-Propylbenzene	0.0500	0.05308		mg/L		106	75 - 125
o-Xylene	0.0500	0.05048		mg/L		101	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05273		mg/L		105	75 - 125
sec-Butylbenzene	0.0500	0.05314		mg/L		106	75 - 125
Styrene	0.0500	0.04633		mg/L		93	75 - 125
tert-Butylbenzene	0.0500	0.05286		mg/L		106	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05014		mg/L		100	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05156		mg/L		103	74 - 125
Tetrachloroethene	0.0500	0.05712		mg/L		114	71 - 125
Toluene	0.0500	0.05326		mg/L		107	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04666		mg/L		93	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05129		mg/L		103	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05252		mg/L		105	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05067		mg/L		101	75 - 135
1,1,1-Trichloroethane	0.0500	0.05067		mg/L		101	70 - 130
1,1,2-Trichloroethane	0.0500	0.05175		mg/L		103	70 - 130
Trichloroethene	0.0500	0.05013		mg/L		100	75 - 135
Trichlorofluoromethane	0.0500	0.05413		mg/L		108	60 - 140
1,2,3-Trichloropropane	0.0500	0.04987		mg/L		100	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05139		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05726		mg/L		115	60 - 140
Vinyl chloride	0.0500	0.05304		mg/L		106	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	97		75 - 131
1,2-Dichloroethane-d4 (Surr)	93		63 - 144
Toluene-d8 (Surr)	97		80 - 117

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-75192/4

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.05082		mg/L		102	75 - 125	6	25
Bromobenzene	0.0500	0.05429		mg/L		109	75 - 125	2	25
Bromochloromethane	0.0500	0.04970		mg/L		99	60 - 140	9	25
Bromodichloromethane	0.0500	0.04754		mg/L		95	75 - 125	4	25
Bromoform	0.0500	0.05054		mg/L		101	70 - 130	1	25
Bromomethane	0.0500	0.03769		mg/L		75	60 - 140	3	25
2-Butanone	0.250	0.2310		mg/L		92	60 - 140	7	25
Carbon tetrachloride	0.0500	0.05450		mg/L		109	70 - 130	1	25
Chlorobenzene	0.0500	0.05149		mg/L		103	65 - 135	1	25
Chloroethane	0.0500	0.04432		mg/L		89	60 - 140	9	25
Chloroform	0.0500	0.05026		mg/L		101	70 - 121	6	25
Chloromethane	0.0500	0.04333		mg/L		87	60 - 140	8	25
2-Chlorotoluene	0.0500	0.05500		mg/L		110	73 - 125	1	25
4-Chlorotoluene	0.0500	0.05479		mg/L		110	74 - 125	1	25
cis-1,2-Dichloroethene	0.0500	0.05075		mg/L		102	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.04782		mg/L		96	74 - 125	4	25
Dibromochloromethane	0.0500	0.04956		mg/L		99	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04821		mg/L		96	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.05434		mg/L		109	73 - 125	0	25
1,2-Dichlorobenzene	0.0500	0.05295		mg/L		106	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.05483		mg/L		110	75 - 125	1	25
1,4-Dichlorobenzene	0.0500	0.05170		mg/L		103	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.05549		mg/L		111	70 - 130	9	25
1,1-Dichloroethane	0.0500	0.05044		mg/L		101	70 - 130	15	25
1,2-Dichloroethane	0.0500	0.05137		mg/L		103	72 - 130	4	25
1,1-Dichloroethene	0.0500	0.04499		mg/L		90	50 - 150	9	25
1,2-Dichloropropane	0.0500	0.05215		mg/L		104	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.05079		mg/L		102	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.04837		mg/L		97	75 - 125	8	25
1,1-Dichloropropene	0.0500	0.05308		mg/L		106	75 - 125	6	25
Ethylbenzene	0.0500	0.05482		mg/L		110	75 - 125	1	25
Hexachlorobutadiene	0.0500	0.05398		mg/L		108	75 - 125	1	25
Isopropylbenzene	0.0500	0.05105		mg/L		102	75 - 125	1	25
Methylene Chloride	0.0500	0.04443		mg/L		89	75 - 125	7	25
m,p-Xylenes	0.0500	0.05503		mg/L		110	75 - 125	2	25
MTBE	0.0500	0.05376		mg/L		108	65 - 135	1	25
Naphthalene	0.0500	0.05645		mg/L		113	70 - 130	5	25
n-Butylbenzene	0.0500	0.05168		mg/L		103	75 - 125	0	25
N-Propylbenzene	0.0500	0.05353		mg/L		107	75 - 125	1	25
o-Xylene	0.0500	0.04988		mg/L		100	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05270		mg/L		105	75 - 125	0	25
sec-Butylbenzene	0.0500	0.05368		mg/L		107	75 - 125	1	25
Styrene	0.0500	0.04587		mg/L		92	75 - 125	1	25
tert-Butylbenzene	0.0500	0.05329		mg/L		107	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.04949		mg/L		99	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.05201		mg/L		104	74 - 125	1	25
Tetrachloroethene	0.0500	0.05664		mg/L		113	71 - 125	1	25
Toluene	0.0500	0.05229		mg/L		105	70 - 130	2	25

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-75192/4

Matrix: Water

Analysis Batch: 75192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.0500	0.04499		mg/L		90	75 - 125	4	25
trans-1,3-Dichloropropene	0.0500	0.05088		mg/L		102	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.05657		mg/L		113	75 - 137	7	25
1,2,4-Trichlorobenzene	0.0500	0.05239		mg/L		105	75 - 135	3	25
1,1,1-Trichloroethane	0.0500	0.04766		mg/L		95	70 - 130	6	25
1,1,2-Trichloroethane	0.0500	0.05074		mg/L		101	70 - 130	2	25
Trichloroethene	0.0500	0.04757		mg/L		95	75 - 135	5	25
Trichlorofluoromethane	0.0500	0.05259		mg/L		105	60 - 140	3	25
1,2,3-Trichloropropane	0.0500	0.04998		mg/L		100	75 - 125	0	25
1,2,4-Trimethylbenzene	0.0500	0.05211		mg/L		104	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.05788		mg/L		116	60 - 140	1	25
Vinyl chloride	0.0500	0.05042		mg/L		101	60 - 140	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		74 - 124
Dibromofluoromethane (Surr)	91		75 - 131
1,2-Dichloroethane-d4 (Surr)	94		63 - 144
Toluene-d8 (Surr)	99		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-75322/3

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.0711	U	0.500	0.0711 mg/L			10/29/22 00:39	1
Chloride	<0.200	U	0.500	0.200 mg/L			10/29/22 00:39	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/29/22 00:39	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/29/22 00:39	1

Lab Sample ID: MB 860-75322/46

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<0.0711	U	0.500	0.0711 mg/L			10/29/22 09:24	1
Chloride	<0.200	U	0.500	0.200 mg/L			10/29/22 09:24	1
Fluoride	<0.100	U	0.500	0.100 mg/L			10/29/22 09:24	1
Sulfate	<0.109	U	0.500	0.109 mg/L			10/29/22 09:24	1

Lab Sample ID: LCS 860-75322/47

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	10.0	9.163		mg/L		92	90 - 110
Chloride	10.0	9.686		mg/L		97	90 - 110
Fluoride	10.0	10.60		mg/L		106	90 - 110

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-75322/47

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	10.0	9.471		mg/L		95	90 - 110

Lab Sample ID: LCSD 860-75322/48

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	10.0	9.237		mg/L		92	90 - 110	1	20
Chloride	10.0	9.722		mg/L		97	90 - 110	0	20
Fluoride	10.0	10.68		mg/L		107	90 - 110	1	20
Sulfate	10.0	9.541		mg/L		95	90 - 110	1	20

Lab Sample ID: LLCS 860-75322/7

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	0.500	0.4833	J	mg/L		97	50 - 150
Chloride	0.500	0.4485	J	mg/L		90	50 - 150
Fluoride	0.500	0.5105		mg/L		102	50 - 150
Sulfate	0.500	0.4967	J	mg/L		99	50 - 150

Lab Sample ID: 880-20870-1 MS

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	0.412	J	10.0	9.614		mg/L		92	90 - 110
Chloride	201		10.0	207.5	4	mg/L		63	90 - 110
Fluoride	0.631		10.0	10.96		mg/L		103	90 - 110
Sulfate	40.1		10.0	50.31	4	mg/L		102	90 - 110

Lab Sample ID: 880-20870-1 MSD

Matrix: Water

Analysis Batch: 75322

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	0.412	J	10.0	9.680		mg/L		93	90 - 110	1	20
Chloride	201		10.0	207.5	4	mg/L		62	90 - 110	0	20
Fluoride	0.631		10.0	11.01		mg/L		104	90 - 110	1	20
Sulfate	40.1		10.0	50.31	4	mg/L		102	90 - 110	0	20

Lab Sample ID: MB 860-75323/3

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			10/29/22 00:39	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/29/22 00:39	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-75323/46

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			10/29/22 09:24	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			10/29/22 09:24	1

Lab Sample ID: LCS 860-75323/47

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.561		mg/L		96	80 - 120
Nitrite as N	5.00	4.869		mg/L		97	80 - 120

Lab Sample ID: LCSD 860-75323/48

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	9.614		mg/L		96	80 - 120	1	20
Nitrite as N	5.00	4.896		mg/L		98	80 - 120	1	20

Lab Sample ID: LLCS 860-75323/6

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.1133		mg/L		113	50 - 150
Nitrite as N	0.100	0.07206	J	mg/L		72	50 - 150

Lab Sample ID: 880-20870-1 MS

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.0757	J	10.0	9.610		mg/L		95	80 - 120
Nitrite as N	0.690	F1	2.50	2.184	F1	mg/L		60	80 - 120

Lab Sample ID: 880-20870-1 MSD

Matrix: Water

Analysis Batch: 75323

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.0757	J	10.0	9.610		mg/L		95	80 - 120	0	15
Nitrite as N	0.690	F1	2.50	2.205	F1	mg/L		61	80 - 120	1	15

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-75386/1-A

Matrix: Water

Analysis Batch: 75571

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 75386

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		10/30/22 12:00	10/31/22 10:28	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		10/30/22 12:00	10/31/22 10:28	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		10/30/22 12:00	10/31/22 10:28	1
Sodium	<0.152	U	0.500	0.152 mg/L		10/30/22 12:00	10/31/22 10:28	1
SiO2	<0.471	U	1.07	0.471 mg/L		10/30/22 12:00	10/31/22 10:28	1

Lab Sample ID: LCS 860-75386/2-A

Matrix: Water

Analysis Batch: 75571

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 75386

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	26.40		mg/L		106	85 - 115
Magnesium	25.0	25.90		mg/L		104	85 - 115
Potassium	10.0	10.20		mg/L		102	85 - 115
Sodium	25.0	25.00		mg/L		100	85 - 115
SiO2	21.4	21.83		mg/L		102	85 - 115

Lab Sample ID: LCSD 860-75386/3-A

Matrix: Water

Analysis Batch: 75571

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 75386

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	26.40		mg/L		106	85 - 115	0	20
Magnesium	25.0	26.00		mg/L		104	85 - 115	0	20
Potassium	10.0	10.30		mg/L		103	85 - 115	1	20
Sodium	25.0	25.00		mg/L		100	85 - 115	0	20
SiO2	21.4	22.04		mg/L		103	85 - 115	1	20

Lab Sample ID: LLCS 860-75386/4-A

Matrix: Water

Analysis Batch: 75571

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 75386

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.200	0.1580	J	mg/L		79	50 - 150
Magnesium	0.200	0.1820	J	mg/L		91	50 - 150
Potassium	0.500	0.4620	J	mg/L		92	50 - 150
Sodium	0.500	0.4550	J	mg/L		91	50 - 150
SiO2	1.07	1.205		mg/L		113	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-75572/4

Matrix: Water

Analysis Batch: 75572

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1

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QC Sample Results

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 860-75572/4

Matrix: Water

Analysis Batch: 75572

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			10/31/22 11:47	1

Lab Sample ID: LCS 860-75572/5

Matrix: Water

Analysis Batch: 75572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	253.0		mg/L		101	85 - 115

Lab Sample ID: LCSD 860-75572/6

Matrix: Water

Analysis Batch: 75572

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	252.6		mg/L		101	85 - 115	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-75236/1

Matrix: Water

Analysis Batch: 75236

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.00	U	5.00	5.00 mg/L			10/28/22 11:31	1

Lab Sample ID: LCS 860-75236/2

Matrix: Water

Analysis Batch: 75236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	947.0		mg/L		95	80 - 120

Lab Sample ID: LCSD 860-75236/3

Matrix: Water

Analysis Batch: 75236

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	968.0		mg/L		97	80 - 120	2	10

Lab Sample ID: LLCS 860-75236/4

Matrix: Water

Analysis Batch: 75236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	5.00	7.000		mg/L		140	50 - 150

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QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 75192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total/NA	Water	8260C	
MB 860-75192/10	Method Blank	Total/NA	Water	8260C	
LCS 860-75192/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-75192/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 75322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total/NA	Water	300.0	
MB 860-75322/3	Method Blank	Total/NA	Water	300.0	
MB 860-75322/46	Method Blank	Total/NA	Water	300.0	
LCS 860-75322/47	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-75322/48	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-75322/7	Lab Control Sample	Total/NA	Water	300.0	
880-20870-1 MS	Levey Well	Total/NA	Water	300.0	
880-20870-1 MSD	Levey Well	Total/NA	Water	300.0	

Analysis Batch: 75323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total/NA	Water	300.0	
MB 860-75323/3	Method Blank	Total/NA	Water	300.0	
MB 860-75323/46	Method Blank	Total/NA	Water	300.0	
LCS 860-75323/47	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-75323/48	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-75323/6	Lab Control Sample	Total/NA	Water	300.0	
880-20870-1 MS	Levey Well	Total/NA	Water	300.0	
880-20870-1 MSD	Levey Well	Total/NA	Water	300.0	

Metals

Prep Batch: 75386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-75386/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-75386/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-75386/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-75386/4-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 75571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	75386
880-20870-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	75386
MB 860-75386/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	75386
LCS 860-75386/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	75386
LCSD 860-75386/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	75386
LLCS 860-75386/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	75386

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 75236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-75236/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-75236/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-75236/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LLCS 860-75236/4	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 75501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 75572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-75572/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-75572/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-75572/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 75613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20870-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-20870-1

Date Collected: 10/27/22 11:20

Matrix: Water

Date Received: 10/27/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	75192	AN	EET HOU	10/28/22 15:20
Total/NA	Analysis	300.0		1	75322	W1N	EET HOU	10/29/22 10:25
Total/NA	Analysis	300.0		1	75323	W1N	EET HOU	10/29/22 10:25
Total Recoverable	Prep	200.7			75386	MD	EET HOU	10/30/22 12:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	75571	JDM	EET HOU	10/31/22 11:27
Total Recoverable	Prep	200.7			75386	MD	EET HOU	10/30/22 12:00
Total Recoverable	Analysis	200.7 Rev 4.4		50	75571	JDM	EET HOU	10/31/22 11:34
Total/NA	Analysis	SM 1030E		1	75613	SC	EET HOU	11/01/22 08:19
Total/NA	Analysis	SM 2320B		1	75572	TL	EET HOU	10/31/22 15:28
Total/NA	Analysis	SM 2540C		1	75236	BSR	EET HOU	10/28/22 11:31
Total/NA	Analysis	SM 4500 H+ B		1	75501	TL	EET HOU	10/31/22 12:20

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-47	06-30-23

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
200.7 Rev 4.4	200.7	Water	SiO2
SM 1030E		Water	Anion/Cation Balance
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity
SM 2320B		Water	Phenolphthalein Alkalinity
SM 4500 H+ B		Water	Temperature

Method Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	MCAWW	EET HOU
200.7 Rev 4.4	Metals (ICP)	EPA	EET HOU
SM 1030E	Cation Anion Balance	SM	EET HOU
SM 2320B	Alkalinity	SM	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
200.7	Preparation, Total Recoverable Metals	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU

Protocol References:
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Ensolum
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-20870-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20870-1	Levey Well	Water	10/27/22 11:20	10/27/22 15:42

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Work Order No: 20510

www.xenco.com Page 1 of 1

ANALYSIS REQUEST

Work Order Notes

TAT starts the day received by the lab if received by 4 30pm

Sample Comments

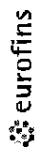
1631 / 245.1 / 7470 / 7471 Hg

[illegible]Date/Time

Eurofins Midland

1211 W. Florida Ave
Midland TX 79701
Phone: 432-704-5440

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Lab P.M.	Kramer Jessica	Carrier Tracking No(s):	COC No. 880-5586.1
Client Contact Shipping/Receiving		Phone:	E-Mail Jessica.Kramer@eurofins.com	State of Origin: New Mexico	Page Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #:	880-20870-1
Address: 4145 Greenbriar Dr		Due Date Requested: 10/29/2022	Analysis Requested		
City: Stafford		TAT Requested (days):	Preservation Codes:		
State, Zip: TX 77477		PO #:	A HCL Hexane B NaOH None C Zn Acetate O AsNaO2 D Nitric Acid P Na2OAS E NaHSO4 Q Na2SO3 F MeOH R Na2SO4 G Anchor T TSP Dodecahydrate H Ascorbic Acid U Acetone I Ice V MCAA J DI Water W pH 4.5 K EDTA Y Trizma L EDA Z other (specify) Other		
Project Name: Levey Well Hobbs. NM 03B1417001		WO #:			
Site		SSOW#:			
Sample Date		Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sealed, Overstabil)	Preservation Code (BT=Base, AA=AU)
10/27/22		11:20	Mountain	Water	
Sample Identification Client ID (Lab ID)		Total Number of Containers			
Levey Well (880-20870-1)		7			
		Field Filled Sample (Yes or No)			
		Perform MS/MSD (Yes or No)			
		8260C/5030C (MOD) Full List VOCs			
		200.7/200.7, P TR (MOD) Custom List			
		300.0 ORGFM_28DI Br Cl, F, SO4			
		300.0 ORGFM_28DI Br Cl, F, SO4			
		SM4600_H+/- pH			
		2540C_Calc'd TDS			
		2320B Alkalinity			
		Cation Anion (MOD) Copy Analytes			
		Special Instructions/Note:			
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin, listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I II III IV Other (specify)					
Primary Deliverable Rank: 2					
Empty Kit Relinquished by:					
Relinquished by: <i>[Signature]</i> Date: _____					
Relinquished by: FedEx Date: _____					
Relinquished by: _____ Date: _____					
Custody Seals Intact: _____ Custody Seal No. _____					
Delta Yes Delta No					
Special Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months					
Special Instructions/QC Requirements.					
Method of Shipment:					
Received by: FedEx Date/Time: _____					
Received by: <i>[Signature]</i> Date/Time: 10/28/2022 10:31					
Received by: _____ Date/Time: _____					
Cooler Temperature(s) °C and Other Ref Temp: 2 IR IDHOU-344					
C/F +1.2 Corrected Temp: 3.2					
Ver 06/08/2021					

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20870-1

SDG Number: Hobbs NM

Login Number: 20870

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-20870-1

SDG Number: Hobbs NM

Login Number: 20870

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Houston

List Creation: 10/28/22 12:25 PM

Question	Answer	Comment
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



ANALYTICAL REPORT

October 12, 2022

Ensolum, LLC

Sample Delivery Group: L1543659
Samples Received: 10/06/2022
Project Number: 03B1417001
Description:
Site: LEVEY WELL
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

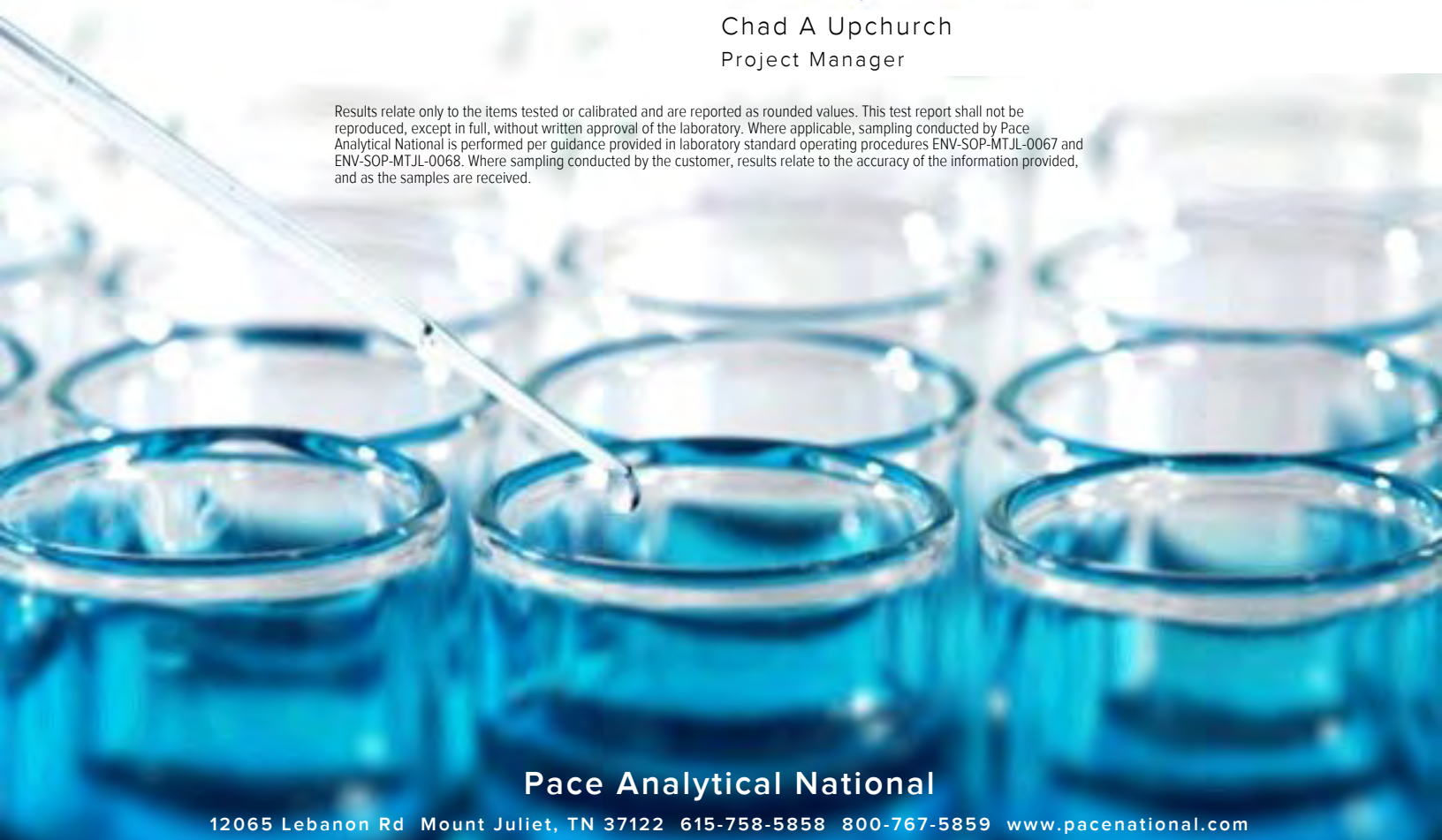


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "Chad Upchurch".

Chad A Upchurch
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1543659-01	9	⁶ Sr
Qc: Quality Control Summary	11	⁷ Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Gl: Glossary of Terms	16	⁸ Gl
Al: Accreditations & Locations	17	
Sc: Sample Chain of Custody	18	⁹ Al
		¹⁰ Sc

LEVEY WELL L1543659-01 Air

Collected by
Shane Diller

Collected date/time
10/04/22 13:27

Received date/time
10/06/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1940727	10000	10/11/22 20:26	10/11/22 20:26	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1941441	100000	10/12/22 14:05	10/12/22 14:05	SDS	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



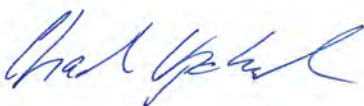
Chad A Upchurch
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Chad A Upchurch
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 10/12/2022 16:13					
Project Name:		Laboratory Job Number: L1543659-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1940727 and WG1941441					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?		X			1
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 10/12/2022 16:13					
Project Name:		Laboratory Job Number: L1543659-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1940727 and WG1941441					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 10/12/2022 16:13	
Project Name:		Laboratory Job Number: L1543659-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1940727 and WG1941441	
ER #¹	Description		
1	TO-15 WG1940727 L1543659-01: The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).		
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

Collected date/time: 10/04/22 13:27

L1543659

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	12500	29700	ND	ND		10000	WG1940727
Allyl chloride	107-05-1	76.53	2000	6260	ND	ND		10000	WG1940727
Benzene	71-43-2	78.10	2000	6390	ND	ND		10000	WG1940727
Benzyl Chloride	100-44-7	127	2000	10400	ND	ND		10000	WG1940727
Bromodichloromethane	75-27-4	164	2000	13400	ND	ND		10000	WG1940727
Bromoform	75-25-2	253	6000	62100	ND	ND		10000	WG1940727
Bromomethane	74-83-9	94.90	2000	7760	ND	ND		10000	WG1940727
1,3-Butadiene	106-99-0	54.10	20000	44300	ND	ND		10000	WG1940727
Carbon disulfide	75-15-0	76.10	2000	6220	ND	ND		10000	WG1940727
Carbon tetrachloride	56-23-5	154	2000	12600	ND	ND		10000	WG1940727
Chlorobenzene	108-90-7	113	2000	9240	ND	ND		10000	WG1940727
Chloroethane	75-00-3	64.50	2000	5280	ND	ND		10000	WG1940727
Chloroform	67-66-3	119	2000	9730	ND	ND		10000	WG1940727
Chloromethane	74-87-3	50.50	2000	4130	ND	ND		10000	WG1940727
2-Chlorotoluene	95-49-8	126	2000	10300	ND	ND		10000	WG1940727
Cyclohexane	110-82-7	84.20	2000	6890	145000	499000		10000	WG1940727
Dibromochloromethane	124-48-1	208	2000	17000	ND	ND		10000	WG1940727
1,2-Dibromoethane	106-93-4	188	2000	15400	ND	ND		10000	WG1940727
1,2-Dichlorobenzene	95-50-1	147	2000	12000	ND	ND		10000	WG1940727
1,3-Dichlorobenzene	541-73-1	147	2000	12000	ND	ND		10000	WG1940727
1,4-Dichlorobenzene	106-46-7	147	2000	12000	ND	ND		10000	WG1940727
1,2-Dichloroethane	107-06-2	99	2000	8100	ND	ND		10000	WG1940727
1,1-Dichloroethane	75-34-3	98	2000	8020	ND	ND		10000	WG1940727
1,1-Dichloroethene	75-35-4	96.90	2000	7930	ND	ND		10000	WG1940727
cis-1,2-Dichloroethene	156-59-2	96.90	2000	7930	ND	ND		10000	WG1940727
trans-1,2-Dichloroethene	156-60-5	96.90	2000	7930	ND	ND		10000	WG1940727
1,2-Dichloropropane	78-87-5	113	2000	9240	ND	ND		10000	WG1940727
cis-1,3-Dichloropropene	10061-01-5	111	2000	9080	ND	ND		10000	WG1940727
trans-1,3-Dichloropropene	10061-02-6	111	2000	9080	ND	ND		10000	WG1940727
1,4-Dioxane	123-91-1	88.10	2000	7210	ND	ND		10000	WG1940727
Ethanol	64-17-5	46.10	12500	23600	406000	766000		10000	WG1940727
Ethylbenzene	100-41-4	106	2000	8670	ND	ND		10000	WG1940727
4-Ethyltoluene	622-96-8	120	2000	9820	ND	ND		10000	WG1940727
Trichlorofluoromethane	75-69-4	137.40	2000	11200	ND	ND		10000	WG1940727
Dichlorodifluoromethane	75-71-8	120.92	2000	9890	ND	ND		10000	WG1940727
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	2000	15300	ND	ND		10000	WG1940727
1,2-Dichlorotetrafluoroethane	76-14-2	171	2000	14000	ND	ND		10000	WG1940727
Heptane	142-82-5	100	2000	8180	222000	908000		10000	WG1940727
Hexachloro-1,3-butadiene	87-68-3	261	6300	67300	ND	ND		10000	WG1940727
n-Hexane	110-54-3	86.20	63000	222000	1840000	6490000		100000	WG1941441
Isopropylbenzene	98-82-8	120.20	2000	9830	ND	ND		10000	WG1940727
Methylene Chloride	75-09-2	84.90	2000	6940	ND	ND		10000	WG1940727
Methyl Butyl Ketone	591-78-6	100	12500	51100	ND	ND		10000	WG1940727
2-Butanone (MEK)	78-93-3	72.10	12500	36900	22700	66900		10000	WG1940727
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	12500	51200	ND	ND		10000	WG1940727
Methyl methacrylate	80-62-6	100.12	2000	8190	45800	188000		10000	WG1940727
MTBE	1634-04-4	88.10	2000	7210	ND	ND		10000	WG1940727
Naphthalene	91-20-3	128	6300	33000	ND	ND		10000	WG1940727
2-Propanol	67-63-0	60.10	12500	30700	1400000	3440000	E	10000	WG1940727
Propene	115-07-1	42.10	12500	21500	ND	ND		10000	WG1940727
Styrene	100-42-5	104	2000	8510	ND	ND		10000	WG1940727
1,1,2,2-Tetrachloroethane	79-34-5	168	2000	13700	ND	ND		10000	WG1940727
Tetrachloroethylene	127-18-4	166	2000	13600	4050	27500		10000	WG1940727
Tetrahydrofuran	109-99-9	72.10	2000	5900	ND	ND		10000	WG1940727
Toluene	108-88-3	92.10	5000	18800	ND	ND		10000	WG1940727
1,2,4-Trichlorobenzene	120-82-1	181	6300	46600	ND	ND		10000	WG1940727

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 10/04/22 13:27

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	2000	10900	ND	ND		10000	WG1940727
1,1,2-Trichloroethane	79-00-5	133	2000	10900	ND	ND		10000	WG1940727
Trichloroethylene	79-01-6	131	2000	10700	ND	ND		10000	WG1940727
1,2,4-Trimethylbenzene	95-63-6	120	2000	9820	ND	ND		10000	WG1940727
1,3,5-Trimethylbenzene	108-67-8	120	2000	9820	ND	ND		10000	WG1940727
2,2,4-Trimethylpentane	540-84-1	114.22	2000	9340	ND	ND		10000	WG1940727
Vinyl chloride	75-01-4	62.50	2000	5110	ND	ND		10000	WG1940727
Vinyl Bromide	593-60-2	106.95	2000	8750	ND	ND		10000	WG1940727
Vinyl acetate	108-05-4	86.10	2000	7040	ND	ND		10000	WG1940727
m&p-Xylene	1330-20-7	106	4000	17300	ND	ND		10000	WG1940727
o-Xylene	95-47-6	106	2000	8670	ND	ND		10000	WG1940727
TPH (GC/MS) Low Fraction	8006-61-9	101	2000000	8260000	7750000	32000000		10000	WG1940727
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.1				WG1940727
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.8				WG1941441

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3847424-3 10/11/22 11:16

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Tr

⁶ Sr

⁷ Qc

⁸ Gl

⁹ Al

¹⁰ Sc

Volatile Organic Compounds (MS) by Method TO-15

L1543659-01

Method Blank (MB)

(MB) R3847424-3 10/11/22 11:16

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.157	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	101			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3847424-1 10/11/22 09:57 • (LCSD) R3847424-2 10/11/22 10:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.13	4.13	110	110	70.0-130			0.000	25
Allyl Chloride	3.75	4.23	3.95	113	105	70.0-130			6.85	25
Benzene	3.75	4.03	4.07	107	109	70.0-130			0.988	25
Benzyl Chloride	3.75	4.01	4.07	107	109	70.0-152			1.49	25
Bromodichloromethane	3.75	4.09	4.06	109	108	70.0-130			0.736	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3847424-1 10/11/22 09:57 • (LCSD) R3847424-2 10/11/22 10:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	3.75	3.80	3.80	101	101	70.0-130			0.000	25
Bromomethane	3.75	4.21	4.49	112	120	70.0-130			6.44	25
1,3-Butadiene	3.75	4.13	4.06	110	108	70.0-130			1.71	25
Carbon disulfide	3.75	4.16	4.21	111	112	70.0-130			1.19	25
Carbon tetrachloride	3.75	4.15	4.12	111	110	70.0-130			0.726	25
Chlorobenzene	3.75	3.94	3.91	105	104	70.0-130			0.764	25
Chloroethane	3.75	3.98	4.33	106	115	70.0-130			8.42	25
Chloroform	3.75	4.22	4.20	113	112	70.0-130			0.475	25
Chloromethane	3.75	4.12	4.13	110	110	70.0-130			0.242	25
2-Chlorotoluene	3.75	4.11	4.09	110	109	70.0-130			0.488	25
Cyclohexane	3.75	4.13	4.09	110	109	70.0-130			0.973	25
Dibromochloromethane	3.75	3.90	3.91	104	104	70.0-130			0.256	25
1,2-Dibromoethane	3.75	4.00	4.00	107	107	70.0-130			0.000	25
1,2-Dichlorobenzene	3.75	4.08	4.10	109	109	70.0-130			0.489	25
1,3-Dichlorobenzene	3.75	4.07	4.16	109	111	70.0-130			2.19	25
1,4-Dichlorobenzene	3.75	4.01	4.09	107	109	70.0-130			1.98	25
1,2-Dichloroethane	3.75	4.11	4.09	110	109	70.0-130			0.488	25
1,1-Dichloroethane	3.75	4.14	4.20	110	112	70.0-130			1.44	25
1,1-Dichloroethene	3.75	4.18	4.19	111	112	70.0-130			0.239	25
cis-1,2-Dichloroethene	3.75	4.17	4.15	111	111	70.0-130			0.481	25
trans-1,2-Dichloroethene	3.75	4.16	4.15	111	111	70.0-130			0.241	25
1,2-Dichloropropane	3.75	4.15	4.08	111	109	70.0-130			1.70	25
cis-1,3-Dichloropropene	3.75	4.06	4.04	108	108	70.0-130			0.494	25
trans-1,3-Dichloropropene	3.75	3.96	3.99	106	106	70.0-130			0.755	25
1,4-Dioxane	3.75	4.31	4.35	115	116	70.0-140			0.924	25
Ethanol	3.75	3.97	4.15	106	111	55.0-148			4.43	25
Ethylbenzene	3.75	4.12	4.02	110	107	70.0-130			2.46	25
4-Ethyltoluene	3.75	4.22	4.18	113	111	70.0-130			0.952	25
Trichlorofluoromethane	3.75	4.26	4.43	114	118	70.0-130			3.91	25
Dichlorodifluoromethane	3.75	4.32	4.34	115	116	64.0-139			0.462	25
1,1,2-Trichlorotrifluoroethane	3.75	4.07	4.09	109	109	70.0-130			0.490	25
1,2-Dichlorotetrafluoroethane	3.75	4.25	4.26	113	114	70.0-130			0.235	25
Heptane	3.75	4.01	4.12	107	110	70.0-130			2.71	25
Hexachloro-1,3-butadiene	3.75	3.67	3.64	97.9	97.1	70.0-151			0.821	25
Isopropylbenzene	3.75	4.14	4.14	110	110	70.0-130			0.000	25
Methylene Chloride	3.75	4.16	4.22	111	113	70.0-130			1.43	25
Methyl Butyl Ketone	3.75	4.10	4.16	109	111	70.0-149			1.45	25
Methyl Ethyl Ketone	3.75	4.04	4.04	108	108	70.0-130			0.000	25
4-Methyl-2-pentanone (MIBK)	3.75	4.33	4.32	115	115	70.0-139			0.231	25
Methyl Methacrylate	3.75	4.05	3.91	108	104	70.0-130			3.52	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3847424-1 10/11/22 09:57 • (LCSD) R3847424-2 10/11/22 10:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
MTBE	3.75	4.17	4.19	111	112	70.0-130			0.478	25
Naphthalene	3.75	3.45	3.48	92.0	92.8	70.0-159			0.866	25
2-Propanol	3.75	4.12	4.15	110	111	70.0-139			0.726	25
Propene	3.75	4.34	4.34	116	116	64.0-144			0.000	25
Styrene	3.75	4.08	4.08	109	109	70.0-130			0.000	25
1,1,2,2-Tetrachloroethane	3.75	4.27	4.27	114	114	70.0-130			0.000	25
Tetrachloroethylene	3.75	3.91	3.88	104	103	70.0-130			0.770	25
Tetrahydrofuran	3.75	4.18	4.24	111	113	70.0-137			1.43	25
Toluene	3.75	4.01	4.03	107	107	70.0-130			0.498	25
1,2,4-Trichlorobenzene	3.75	3.63	3.70	96.8	98.7	70.0-160			1.91	25
1,1,1-Trichloroethane	3.75	4.17	4.16	111	111	70.0-130			0.240	25
1,1,2-Trichloroethane	3.75	3.97	4.05	106	108	70.0-130			2.00	25
Trichloroethylene	3.75	4.04	4.05	108	108	70.0-130			0.247	25
1,2,4-Trimethylbenzene	3.75	4.20	4.17	112	111	70.0-130			0.717	25
1,3,5-Trimethylbenzene	3.75	4.16	4.14	111	110	70.0-130			0.482	25
2,2,4-Trimethylpentane	3.75	4.24	4.25	113	113	70.0-130			0.236	25
Vinyl chloride	3.75	3.98	3.98	106	106	70.0-130			0.000	25
Vinyl Bromide	3.75	4.16	4.49	111	120	70.0-130			7.63	25
Vinyl acetate	3.75	3.78	3.85	101	103	70.0-130			1.83	25
m&p-Xylene	7.50	8.14	8.09	109	108	70.0-130			0.616	25
o-Xylene	3.75	4.07	4.05	109	108	70.0-130			0.493	25
TPH (GC/MS) Low Fraction	203	235	234	116	115	70.0-130			0.426	25
(S) 1,4-Bromofluorobenzene				100	101	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1543659-01](#)

Method Blank (MB)

(MB) R3847683-3 10/12/22 10:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	88.6			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3847683-1 10/12/22 09:01 • (LCSD) R3847683-2 10/12/22 09:45

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	3.89	3.95	104	105	70.0-130			1.53	25
(S) 1,4-Bromofluorobenzene				95.3	93.9	60.0-140				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Released to Imaging: 2/29/2024 4:01:14 PM



ANALYTICAL REPORT

October 19, 2022

Ensolum, LLC

Sample Delivery Group: L1546631
Samples Received: 10/14/2022
Project Number: 03B1417001
Description: Levey Well

Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "Chad Upchurch".

Chad A Upchurch
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	⁶ Sr
LEVEY WELL L1546631-01	9	
LEVEY WELL L1546631-02	11	
LEVEY WELL L1546631-03	13	⁷ Qc
LEVEY WELL L1546631-04	15	⁸ Gl
Qc: Quality Control Summary	17	
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Gl: Glossary of Terms	28	
Al: Accreditations & Locations	29	¹⁰ Sc
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LEVEY WELL L1546631-01 Air

Collected by
Shane Diller

Collected date/time
10/10/22 12:26

Received date/time
10/14/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1944038	200	10/17/22 16:59	10/17/22 16:59	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944614	10000	10/18/22 17:25	10/18/22 17:25	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1945301	100000	10/19/22 12:09	10/19/22 12:09	CEP	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

LEVEY WELL L1546631-02 Air

Collected by
Shane Diller

Collected date/time
10/10/22 13:26

Received date/time
10/14/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1943617	1	10/16/22 16:13	10/16/22 16:13	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944037	100	10/17/22 22:14	10/17/22 22:14	DBB	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944614	100	10/18/22 17:54	10/18/22 17:54	SDS	Mt. Juliet, TN

LEVEY WELL L1546631-03 Air

Collected by
Shane Diller

Collected date/time
10/10/22 14:38

Received date/time
10/14/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1943617	1	10/16/22 16:42	10/16/22 16:42	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944037	100	10/17/22 22:45	10/17/22 22:45	DBB	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944614	100	10/18/22 18:22	10/18/22 18:22	SDS	Mt. Juliet, TN

LEVEY WELL L1546631-04 Air

Collected by
Shane Diller

Collected date/time
10/10/22 15:38

Received date/time
10/14/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1943617	1	10/16/22 17:11	10/16/22 17:11	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944037	400	10/17/22 23:13	10/17/22 23:13	DBB	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944614	400	10/18/22 18:48	10/18/22 18:48	SDS	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chad A Upchurch
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Chad A Upchurch
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National			LRC Date: 10/19/2022 17:03				
Project Name: Levey Well			Laboratory Job Number: L1546631-01, 02, 03 and 04				
Reviewer Name: Chad A Upchurch			Prep Batch Number(s): WG1943617, WG1944038, WG1944037, WG1944614 and WG1945301				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?		X			2
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 10/19/2022 17:03					
Project Name: Levey Well		Laboratory Job Number: L1546631-01, 02, 03 and 04					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1943617, WG1944038, WG1944037, WG1944614 and WG1945301					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 10/19/2022 17:03	
Project Name: Levey Well		Laboratory Job Number: L1546631-01, 02, 03 and 04	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1943617, WG1944038, WG1944037, WG1944614 and WG1945301	
ER #¹	Description		
1	TO-15 WG1943617 1,4-Bromofluorobenzene L1546631-04: Percent Recovery is outside of established control limits.		
2	TO-15 WG1944038 Chloroethane: Relative Percent Difference is outside of established control limits.		
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

Collected date/time: 10/10/22 12:26

L1546631

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	250	594	6700	15900		200	WG1944038
Allyl chloride	107-05-1	76.53	40.0	125	ND	ND		200	WG1944038
Benzene	71-43-2	78.10	40.0	128	ND	ND		200	WG1944038
Benzyl Chloride	100-44-7	127	40.0	208	ND	ND		200	WG1944038
Bromodichloromethane	75-27-4	164	40.0	268	ND	ND		200	WG1944038
Bromoform	75-25-2	253	120	1240	ND	ND		200	WG1944038
Bromomethane	74-83-9	94.90	40.0	155	ND	ND		200	WG1944038
1,3-Butadiene	106-99-0	54.10	400	885	ND	ND		200	WG1944038
Carbon disulfide	75-15-0	76.10	40.0	124	41.0	128		200	WG1944038
Carbon tetrachloride	56-23-5	154	40.0	252	ND	ND		200	WG1944038
Chlorobenzene	108-90-7	113	40.0	185	ND	ND		200	WG1944038
Chloroethane	75-00-3	64.50	40.0	106	ND	ND	J3	200	WG1944038
Chloroform	67-66-3	119	40.0	195	ND	ND		200	WG1944038
Chloromethane	74-87-3	50.50	40.0	82.6	ND	ND		200	WG1944038
2-Chlorotoluene	95-49-8	126	40.0	206	ND	ND		200	WG1944038
Cyclohexane	110-82-7	84.20	2000	6890	120000	413000		10000	WG1944614
Dibromochloromethane	124-48-1	208	40.0	340	ND	ND		200	WG1944038
1,2-Dibromoethane	106-93-4	188	40.0	308	ND	ND		200	WG1944038
1,2-Dichlorobenzene	95-50-1	147	40.0	240	ND	ND		200	WG1944038
1,3-Dichlorobenzene	541-73-1	147	40.0	240	ND	ND		200	WG1944038
1,4-Dichlorobenzene	106-46-7	147	40.0	240	ND	ND		200	WG1944038
1,2-Dichloroethane	107-06-2	99	40.0	162	ND	ND		200	WG1944038
1,1-Dichloroethane	75-34-3	98	40.0	160	ND	ND		200	WG1944038
1,1-Dichloroethene	75-35-4	96.90	40.0	159	ND	ND		200	WG1944038
cis-1,2-Dichloroethene	156-59-2	96.90	40.0	159	ND	ND		200	WG1944038
trans-1,2-Dichloroethene	156-60-5	96.90	40.0	159	ND	ND		200	WG1944038
1,2-Dichloropropane	78-87-5	113	40.0	185	ND	ND		200	WG1944038
cis-1,3-Dichloropropene	10061-01-5	111	40.0	182	ND	ND		200	WG1944038
trans-1,3-Dichloropropene	10061-02-6	111	40.0	182	ND	ND		200	WG1944038
1,4-Dioxane	123-91-1	88.10	40.0	144	ND	ND		200	WG1944038
Ethanol	64-17-5	46.10	250	471	1100	2070		200	WG1944038
Ethylbenzene	100-41-4	106	40.0	173	ND	ND		200	WG1944038
4-Ethyltoluene	622-96-8	120	40.0	196	ND	ND		200	WG1944038
Trichlorofluoromethane	75-69-4	137.40	40.0	225	ND	ND		200	WG1944038
Dichlorodifluoromethane	75-71-8	120.92	40.0	198	ND	ND		200	WG1944038
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	40.0	307	ND	ND		200	WG1944038
1,2-Dichlorotetrafluoroethane	76-14-2	171	40.0	280	ND	ND		200	WG1944038
Heptane	142-82-5	100	2000	8180	161000	658000		10000	WG1944614
Hexachloro-1,3-butadiene	87-68-3	261	126	1350	ND	ND		200	WG1944038
n-Hexane	110-54-3	86.20	63000	222000	2200000	7760000		100000	WG1945301
Isopropylbenzene	98-82-8	120.20	40.0	197	ND	ND		200	WG1944038
Methylene Chloride	75-09-2	84.90	40.0	139	ND	ND		200	WG1944038
Methyl Butyl Ketone	591-78-6	100	250	1020	ND	ND		200	WG1944038
2-Butanone (MEK)	78-93-3	72.10	250	737	4020	11900		200	WG1944038
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	250	1020	ND	ND		200	WG1944038
Methyl methacrylate	80-62-6	100.12	40.0	164	ND	ND		200	WG1944038
MTBE	1634-04-4	88.10	40.0	144	ND	ND		200	WG1944038
Naphthalene	91-20-3	128	126	660	ND	ND		200	WG1944038
2-Propanol	67-63-0	60.10	250	615	3870	9510		200	WG1944038
Propene	115-07-1	42.10	250	430	ND	ND		200	WG1944038
Styrene	100-42-5	104	40.0	170	ND	ND		200	WG1944038
1,1,2,2-Tetrachloroethane	79-34-5	168	40.0	275	ND	ND		200	WG1944038
Tetrachloroethylene	127-18-4	166	40.0	272	ND	ND		200	WG1944038
Tetrahydrofuran	109-99-9	72.10	40.0	118	ND	ND		200	WG1944038
Toluene	108-88-3	92.10	100	377	ND	ND		200	WG1944038
1,2,4-Trichlorobenzene	120-82-1	181	126	933	ND	ND		200	WG1944038



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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	40.0	218	ND	ND		200	WG1944038
1,1,2-Trichloroethane	79-00-5	133	40.0	218	ND	ND		200	WG1944038
Trichloroethylene	79-01-6	131	40.0	214	260	1390		200	WG1944038
1,2,4-Trimethylbenzene	95-63-6	120	40.0	196	ND	ND		200	WG1944038
1,3,5-Trimethylbenzene	108-67-8	120	40.0	196	41.9	206		200	WG1944038
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	ND	ND		200	WG1944038
Vinyl chloride	75-01-4	62.50	40.0	102	ND	ND		200	WG1944038
Vinyl Bromide	593-60-2	106.95	40.0	175	ND	ND		200	WG1944038
Vinyl acetate	108-05-4	86.10	40.0	141	ND	ND		200	WG1944038
m&p-Xylene	1330-20-7	106	80.0	347	ND	ND		200	WG1944038
o-Xylene	95-47-6	106	40.0	173	ND	ND		200	WG1944038
TPH (GC/MS) Low Fraction	8006-61-9	101	2000000	8260000	5950000	24600000		10000	WG1944614
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1944038
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.9				WG1944614
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.4				WG1945301

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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L1546631

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	29.9	71.1		1	WG1943617
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1943617
Benzene	71-43-2	78.10	0.200	0.639	0.475	1.52		1	WG1943617
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1943617
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1943617
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1943617
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1943617
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1943617
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.238	0.741		1	WG1943617
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1943617
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1943617
Chloroethane	75-00-3	64.50	0.200	0.528	0.791	2.09		1	WG1943617
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1943617
Chloromethane	74-87-3	50.50	0.200	0.413	4.46	9.21		1	WG1943617
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1943617
Cyclohexane	110-82-7	84.20	20.0	68.9	406	1400		100	WG1944037
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1943617
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1943617
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1943617
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1943617
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1943617
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1943617
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1943617
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1943617
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1943617
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1943617
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1943617
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1943617
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1943617
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1943617
Ethanol	64-17-5	46.10	1.25	2.36	7.86	14.8		1	WG1943617
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1943617
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.710	3.48		1	WG1943617
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1943617
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.274	1.36		1	WG1943617
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1943617
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1943617
Heptane	142-82-5	100	20.0	81.8	941	3850		100	WG1944037
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1943617
n-Hexane	110-54-3	86.20	63.0	222	4240	14900		100	WG1944037
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1943617
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.263	0.913		1	WG1943617
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1943617
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	37.0	109		1	WG1943617
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1943617
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1943617
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1943617
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1943617
2-Propanol	67-63-0	60.10	1.25	3.07	3.46	8.50		1	WG1943617
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1943617
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1943617
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1943617
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1943617
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1943617
Toluene	108-88-3	92.10	0.500	1.88	0.818	3.08		1	WG1943617
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1943617

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1943617
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1943617
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1943617
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.18	5.79		1	WG1943617
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.64	8.05		1	WG1943617
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1943617
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1943617
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1943617
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1943617
m&p-Xylene	1330-20-7	106	0.400	1.73	1.14	4.94		1	WG1943617
o-Xylene	95-47-6	106	0.200	0.867	0.612	2.65		1	WG1943617
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	29900	124000	B	100	WG1944614
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		109				WG1943617
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.5				WG1944037
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.0				WG1944614

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

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L1546631

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	39.9	94.8		1	WG1943617
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1943617
Benzene	71-43-2	78.10	0.200	0.639	0.289	0.923		1	WG1943617
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1943617
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1943617
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1943617
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1943617
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1943617
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.216	0.672		1	WG1943617
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1943617
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1943617
Chloroethane	75-00-3	64.50	0.200	0.528	0.987	2.60		1	WG1943617
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1943617
Chloromethane	74-87-3	50.50	0.200	0.413	1.25	2.58		1	WG1943617
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1943617
Cyclohexane	110-82-7	84.20	20.0	68.9	372	1280		100	WG1944037
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1943617
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1943617
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1943617
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1943617
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1943617
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1943617
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1943617
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1943617
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1943617
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1943617
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1943617
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1943617
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1943617
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1943617
Ethanol	64-17-5	46.10	1.25	2.36	8.66	16.3		1	WG1943617
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1943617
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.539	2.65		1	WG1943617
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1943617
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.330	1.63		1	WG1943617
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1943617
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1943617
Heptane	142-82-5	100	20.0	81.8	744	3040		100	WG1944037
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1943617
n-Hexane	110-54-3	86.20	63.0	222	3810	13400		100	WG1944037
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1943617
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.269	0.934		1	WG1943617
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1943617
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	31.2	92.0		1	WG1943617
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1943617
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1943617
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1943617
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1943617
2-Propanol	67-63-0	60.10	1.25	3.07	48.7	120		1	WG1943617
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1943617
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1943617
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1943617
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1943617
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1943617
Toluene	108-88-3	92.10	0.500	1.88	0.519	1.96		1	WG1943617
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1943617



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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1943617
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1943617
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1943617
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.546	2.68		1	WG1943617
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.31	6.43		1	WG1943617
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1943617
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1943617
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1943617
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1943617
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1943617
o-Xylene	95-47-6	106	0.200	0.867	0.420	1.82		1	WG1943617
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	25200	104000	B	100	WG1944614
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1943617
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.5				WG1944037
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.9				WG1944614

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

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L1546631

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG1943617
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1943617
Benzene	71-43-2	78.10	0.200	0.639	1.29	4.12		1	WG1943617
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1943617
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1943617
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1943617
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1943617
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1943617
Carbon disulfide	75-15-0	76.10	0.200	0.622	4.98	15.5		1	WG1943617
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1943617
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1943617
Chloroethane	75-00-3	64.50	0.200	0.528	9.17	24.2		1	WG1943617
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1943617
Chloromethane	74-87-3	50.50	0.200	0.413	8.02	16.6		1	WG1943617
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1943617
Cyclohexane	110-82-7	84.20	80.0	276	4220	14500		400	WG1944037
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1943617
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1943617
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1943617
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1943617
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1943617
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1943617
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1943617
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1943617
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1943617
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1943617
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1943617
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1943617
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1943617
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1943617
Ethanol	64-17-5	46.10	1.25	2.36	63.4	120		1	WG1943617
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1943617
4-Ethyltoluene	622-96-8	120	0.200	0.982	4.75	23.3		1	WG1943617
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1943617
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1943617
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1943617
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1943617
Heptane	142-82-5	100	80.0	327	8480	34700		400	WG1944037
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1943617
n-Hexane	110-54-3	86.20	252	888	34600	122000		400	WG1944037
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1943617
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1943617
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1943617
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	89.1	263		1	WG1943617
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1943617
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1943617
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1943617
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1943617
2-Propanol	67-63-0	60.10	1.25	3.07	20.0	49.2		1	WG1943617
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1943617
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1943617
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1943617
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1943617
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1943617
Toluene	108-88-3	92.10	0.500	1.88	2.43	9.15		1	WG1943617
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1943617



Collected date/time: 10/10/22 15:38 L1546631

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1943617
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1943617
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1943617
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	4.00	19.6		1	WG1943617
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	11.4	56.0		1	WG1943617
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1943617
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1943617
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1943617
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1943617
m&p-Xylene	1330-20-7	106	0.400	1.73	2.92	12.7		1	WG1943617
o-Xylene	95-47-6	106	0.200	0.867	4.06	17.6		1	WG1943617
TPH (GC/MS) Low Fraction	8006-61-9	101	80000	330000	169000	698000	B	400	WG1944614
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		214		J1		WG1943617
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.4				WG1944037
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.4				WG1944614

Sample Narrative:

L1546631-04 WG1943617: Surrogate failure due to matrix interference

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3849213-3 10/16/22 10:17

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1546631-02.03.04

Method Blank (MB)

(MB) R3849213-3 10/16/22 10:17

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.109	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	93.9			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849213-1 10/16/22 09:18 • (LCSD) R3849213-2 10/16/22 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	2.75	2.90	73.3	77.3	70.0-130			5.31	25
Allyl Chloride	3.75	3.90	3.85	104	103	70.0-130			1.29	25
Benzene	3.75	3.71	3.65	98.9	97.3	70.0-130			1.63	25
Benzyl Chloride	3.75	4.18	4.06	111	108	70.0-152			2.91	25
Bromodichloromethane	3.75	3.64	3.57	97.1	95.2	70.0-130			1.94	25
Bromoform	3.75	3.89	3.80	104	101	70.0-130			2.34	25
Bromomethane	3.75	3.83	3.77	102	101	70.0-130			1.58	25
1,3-Butadiene	3.75	4.03	4.00	107	107	70.0-130			0.747	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849213-1 10/16/22 09:18 • (LCSD) R3849213-2 10/16/22 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	3.75	3.78	3.74	101	99.7	70.0-130			1.06	25
Carbon tetrachloride	3.75	3.84	3.79	102	101	70.0-130			1.31	25
Chlorobenzene	3.75	3.94	3.89	105	104	70.0-130			1.28	25
Chloroethane	3.75	3.87	3.78	103	101	70.0-130			2.35	25
Chloroform	3.75	3.74	3.69	99.7	98.4	70.0-130			1.35	25
Chloromethane	3.75	3.95	3.93	105	105	70.0-130			0.508	25
2-Chlorotoluene	3.75	4.06	4.02	108	107	70.0-130			0.990	25
Dibromochloromethane	3.75	3.76	3.72	100	99.2	70.0-130			1.07	25
1,2-Dibromoethane	3.75	3.74	3.67	99.7	97.9	70.0-130			1.89	25
1,2-Dichlorobenzene	3.75	4.06	4.02	108	107	70.0-130			0.990	25
1,3-Dichlorobenzene	3.75	4.20	4.15	112	111	70.0-130			1.20	25
1,4-Dichlorobenzene	3.75	4.29	4.24	114	113	70.0-130			1.17	25
1,2-Dichloroethane	3.75	3.75	3.69	100	98.4	70.0-130			1.61	25
1,1-Dichloroethane	3.75	3.69	3.65	98.4	97.3	70.0-130			1.09	25
1,1-Dichloroethene	3.75	3.88	3.82	103	102	70.0-130			1.56	25
cis-1,2-Dichloroethene	3.75	3.69	3.68	98.4	98.1	70.0-130			0.271	25
trans-1,2-Dichloroethene	3.75	3.98	3.82	106	102	70.0-130			4.10	25
1,2-Dichloropropane	3.75	3.73	3.65	99.5	97.3	70.0-130			2.17	25
cis-1,3-Dichloropropene	3.75	3.83	3.78	102	101	70.0-130			1.31	25
trans-1,3-Dichloropropene	3.75	3.87	3.78	103	101	70.0-130			2.35	25
1,4-Dioxane	3.75	3.62	3.61	96.5	96.3	70.0-140			0.277	25
Ethanol	3.75	3.98	3.86	106	103	55.0-148			3.06	25
Ethylbenzene	3.75	3.95	3.92	105	105	70.0-130			0.762	25
4-Ethyltoluene	3.75	4.42	4.37	118	117	70.0-130			1.14	25
Trichlorofluoromethane	3.75	3.90	3.88	104	103	70.0-130			0.514	25
Dichlorodifluoromethane	3.75	3.97	3.93	106	105	64.0-139			1.01	25
1,1,2-Trichlorotrifluoroethane	3.75	3.79	3.75	101	100	70.0-130			1.06	25
1,2-Dichlorotetrafluoroethane	3.75	3.97	3.93	106	105	70.0-130			1.01	25
Hexachloro-1,3-butadiene	3.75	4.07	4.04	109	108	70.0-151			0.740	25
Isopropylbenzene	3.75	4.11	4.04	110	108	70.0-130			1.72	25
Methylene Chloride	3.75	3.86	3.80	103	101	70.0-130			1.57	25
Methyl Butyl Ketone	3.75	4.03	3.95	107	105	70.0-149			2.01	25
Methyl Ethyl Ketone	3.75	3.81	3.79	102	101	70.0-130			0.526	25
4-Methyl-2-pentanone (MIBK)	3.75	4.02	3.96	107	106	70.0-139			1.50	25
Methyl Methacrylate	3.75	3.89	3.83	104	102	70.0-130			1.55	25
MTBE	3.75	3.86	3.83	103	102	70.0-130			0.780	25
Naphthalene	3.75	4.75	4.71	127	126	70.0-159			0.846	25
2-Propanol	3.75	3.77	3.72	101	99.2	70.0-139			1.34	25
Propene	3.75	3.75	3.66	100	97.6	64.0-144			2.43	25
Styrene	3.75	4.24	4.16	113	111	70.0-130			1.90	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849213-1 10/16/22 09:18 • (LCSD) R3849213-2 10/16/22 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	3.75	3.90	3.87	104	103	70.0-130			0.772	25
Tetrachloroethylene	3.75	3.83	3.75	102	100	70.0-130			2.11	25
Tetrahydrofuran	3.75	3.95	3.88	105	103	70.0-137			1.79	25
Toluene	3.75	3.86	3.81	103	102	70.0-130			1.30	25
1,2,4-Trichlorobenzene	3.75	4.30	4.30	115	115	70.0-160			0.000	25
1,1,1-Trichloroethane	3.75	3.66	3.65	97.6	97.3	70.0-130			0.274	25
1,1,2-Trichloroethane	3.75	3.61	3.53	96.3	94.1	70.0-130			2.24	25
Trichloroethylene	3.75	3.55	3.51	94.7	93.6	70.0-130			1.13	25
1,2,4-Trimethylbenzene	3.75	4.64	4.58	124	122	70.0-130			1.30	25
1,3,5-Trimethylbenzene	3.75	4.39	4.33	117	115	70.0-130			1.38	25
2,2,4-Trimethylpentane	3.75	3.96	3.92	106	105	70.0-130			1.02	25
Vinyl chloride	3.75	4.00	3.91	107	104	70.0-130			2.28	25
Vinyl Bromide	3.75	3.80	3.74	101	99.7	70.0-130			1.59	25
Vinyl acetate	3.75	3.76	3.71	100	98.9	70.0-130			1.34	25
m&p-Xylene	7.50	8.58	8.51	114	113	70.0-130			0.819	25
o-Xylene	3.75	4.35	4.27	116	114	70.0-130			1.86	25
(S) 1,4-Bromofluorobenzene				100	101	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1546631-02,03,04](#)

Method Blank (MB)

(MB) R3849396-2 10/17/22 10:13

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	95.1			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849396-1 10/17/22 09:43 • (LCSD) R3849396-3 10/17/22 11:47

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyclohexane	3.75	4.19	4.23	112	113	70.0-130			0.950	25
Heptane	3.75	4.38	4.42	117	118	70.0-130			0.909	25
n-Hexane	3.75	4.29	4.35	114	116	70.0-130			1.39	25
(S) 1,4-Bromofluorobenzene				100	98.7	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1546631-01](#)

Method Blank (MB)

(MB) R3849379-3 10/17/22 10:46

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1546631-01

Method Blank (MB)

(MB) R3849379-3 10/17/22 10:46

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.218	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	96.5			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849379-1 10/17/22 09:24 • (LCSD) R3849379-2 10/17/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.31	4.37	115	117	70.0-130			1.38	25
Allyl Chloride	3.75	4.35	4.44	116	118	70.0-130			2.05	25
Benzene	3.75	4.23	4.28	113	114	70.0-130			1.18	25
Benzyl Chloride	3.75	4.15	4.24	111	113	70.0-152			2.15	25
Bromodichloromethane	3.75	4.20	4.24	112	113	70.0-130			0.948	25
Bromoform	3.75	4.00	4.06	107	108	70.0-130			1.49	25
Bromomethane	3.75	3.61	3.56	96.3	94.9	70.0-130			1.39	25
1,3-Butadiene	3.75	3.56	3.47	94.9	92.5	70.0-130			2.56	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849379-1 10/17/22 09:24 • (LCSD) R3849379-2 10/17/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	3.75	4.32	4.40	115	117	70.0-130			1.83	25
Carbon tetrachloride	3.75	4.18	4.26	111	114	70.0-130			1.90	25
Chlorobenzene	3.75	4.33	4.36	115	116	70.0-130			0.690	25
Chloroethane	3.75	4.51	3.21	120	85.6	70.0-130		J3	33.7	25
Chloroform	3.75	4.18	4.26	111	114	70.0-130			1.90	25
Chloromethane	3.75	4.36	4.45	116	119	70.0-130			2.04	25
2-Chlorotoluene	3.75	4.22	4.26	113	114	70.0-130			0.943	25
Dibromochloromethane	3.75	4.25	4.26	113	114	70.0-130			0.235	25
1,2-Dibromoethane	3.75	4.35	4.34	116	116	70.0-130			0.230	25
1,2-Dichlorobenzene	3.75	4.06	4.13	108	110	70.0-130			1.71	25
1,3-Dichlorobenzene	3.75	4.15	4.23	111	113	70.0-130			1.91	25
1,4-Dichlorobenzene	3.75	4.28	4.38	114	117	70.0-130			2.31	25
1,2-Dichloroethane	3.75	4.18	4.20	111	112	70.0-130			0.477	25
1,1-Dichloroethane	3.75	4.33	4.37	115	117	70.0-130			0.920	25
1,1-Dichloroethene	3.75	4.31	4.40	115	117	70.0-130			2.07	25
cis-1,2-Dichloroethene	3.75	4.31	4.35	115	116	70.0-130			0.924	25
trans-1,2-Dichloroethene	3.75	4.31	4.39	115	117	70.0-130			1.84	25
1,2-Dichloropropane	3.75	4.29	4.33	114	115	70.0-130			0.928	25
cis-1,3-Dichloropropene	3.75	4.19	4.23	112	113	70.0-130			0.950	25
trans-1,3-Dichloropropene	3.75	4.16	4.23	111	113	70.0-130			1.67	25
1,4-Dioxane	3.75	3.70	3.73	98.7	99.5	70.0-140			0.808	25
Ethanol	3.75	3.96	4.05	106	108	55.0-148			2.25	25
Ethylbenzene	3.75	4.26	4.32	114	115	70.0-130			1.40	25
4-Ethyltoluene	3.75	4.17	4.21	111	112	70.0-130			0.955	25
Trichlorofluoromethane	3.75	4.26	4.30	114	115	70.0-130			0.935	25
Dichlorodifluoromethane	3.75	4.28	4.35	114	116	64.0-139			1.62	25
1,1,2-Trichlorotrifluoroethane	3.75	4.30	4.34	115	116	70.0-130			0.926	25
1,2-Dichlorotetrafluoroethane	3.75	4.27	4.33	114	115	70.0-130			1.40	25
Hexachloro-1,3-butadiene	3.75	3.58	3.69	95.5	98.4	70.0-151			3.03	25
Isopropylbenzene	3.75	4.09	4.12	109	110	70.0-130			0.731	25
Methylene Chloride	3.75	4.36	4.45	116	119	70.0-130			2.04	25
Methyl Butyl Ketone	3.75	4.01	4.05	107	108	70.0-149			0.993	25
Methyl Ethyl Ketone	3.75	4.30	4.40	115	117	70.0-130			2.30	25
4-Methyl-2-pentanone (MIBK)	3.75	4.28	4.31	114	115	70.0-139			0.698	25
Methyl Methacrylate	3.75	4.39	4.39	117	117	70.0-130			0.000	25
MTBE	3.75	4.21	4.25	112	113	70.0-130			0.946	25
Naphthalene	3.75	3.60	3.72	96.0	99.2	70.0-159			3.28	25
2-Propanol	3.75	4.13	4.18	110	111	70.0-139			1.20	25
Propene	3.75	4.29	4.36	114	116	64.0-144			1.62	25
Styrene	3.75	4.22	4.25	113	113	70.0-130			0.708	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849379-1 10/17/22 09:24 • (LCSD) R3849379-2 10/17/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	3.75	4.24	4.29	113	114	70.0-130			1.17	25
Tetrachloroethylene	3.75	3.98	4.06	106	108	70.0-130			1.99	25
Tetrahydrofuran	3.75	4.41	4.54	118	121	70.0-137			2.91	25
Toluene	3.75	4.10	4.14	109	110	70.0-130			0.971	25
1,2,4-Trichlorobenzene	3.75	3.53	3.66	94.1	97.6	70.0-160			3.62	25
1,1,1-Trichloroethane	3.75	4.20	4.27	112	114	70.0-130			1.65	25
1,1,2-Trichloroethane	3.75	4.11	4.25	110	113	70.0-130			3.35	25
Trichloroethylene	3.75	4.14	4.17	110	111	70.0-130			0.722	25
1,2,4-Trimethylbenzene	3.75	4.12	4.19	110	112	70.0-130			1.68	25
1,3,5-Trimethylbenzene	3.75	4.14	4.21	110	112	70.0-130			1.68	25
2,2,4-Trimethylpentane	3.75	4.32	4.40	115	117	70.0-130			1.83	25
Vinyl chloride	3.75	4.03	4.04	107	108	70.0-130			0.248	25
Vinyl Bromide	3.75	4.26	4.31	114	115	70.0-130			1.17	25
Vinyl acetate	3.75	4.27	4.35	114	116	70.0-130			1.86	25
m&p-Xylene	7.50	8.31	8.39	111	112	70.0-130			0.958	25
o-Xylene	3.75	4.05	4.07	108	109	70.0-130			0.493	25
(S) 1,4-Bromofluorobenzene				98.5	98.0	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3850027-3 10/18/22 10:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
TPH (GC/MS) Low Fraction	49.9	J	39.7	200
(S) 1,4-Bromofluorobenzene	90.7			60.0-140

Method Blank (MB)

(MB) R3850314-3 10/19/22 09:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
TPH (GC/MS) Low Fraction	49.4	J	39.7	200
(S) 1,4-Bromofluorobenzene	92.1			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3850027-1 10/18/22 09:01 • (LCSD) R3850027-2 10/18/22 09:32

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Cyclohexane	3.75	3.94	3.95	105	105	70.0-130			0.253	25
Heptane	3.75	4.15	4.13	111	110	70.0-130			0.483	25
TPH (GC/MS) Low Fraction	203	225	226	111	111	70.0-130			0.443	25
(S) 1,4-Bromofluorobenzene				93.3	94.0	60.0-140				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3850314-1 10/19/22 08:26 • (LCSD) R3850314-2 10/19/22 08:57

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Cyclohexane	3.75	4.21	4.20	112	112	70.0-130			0.238	25
Heptane	3.75	4.04	4.05	108	108	70.0-130			0.247	25
TPH (GC/MS) Low Fraction	203	224	223	110	110	70.0-130			0.447	25
(S) 1,4-Bromofluorobenzene				94.9	95.1	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1546631-01](#)

Method Blank (MB)

(MB) R3850515-3 10/19/22 10:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	87.2			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3850515-1 10/19/22 08:39 • (LCSD) R3850515-2 10/19/22 09:21

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	4.56	4.58	122	122	70.0-130			0.438	25
(S) 1,4-Bromofluorobenzene				94.1	93.8	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

[illegible]



ANALYTICAL REPORT

October 20, 2022

Ensolum, LLC

Sample Delivery Group: L1546950
Samples Received: 10/15/2022
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

¹Cp²Tc³Ss⁴Cn⁵Tr⁶Sr⁷Qc⁸Gl⁹Al¹⁰Sc

Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "Chad Upchurch".

Chad A Upchurch
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1546950-01	9	⁶ Sr
Qc: Quality Control Summary	11	⁷ Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Gl: Glossary of Terms	17	⁸ Gl
Al: Accreditations & Locations	18	
Sc: Sample Chain of Custody	19	⁹ Al
		¹⁰ Sc

LEVEY WELL L1546950-01 Air

Collected by
Shane Diller

Collected date/time
10/14/22 11:36

Received date/time
10/15/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1944038	200	10/17/22 18:57	10/17/22 18:57	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1944614	2000	10/18/22 21:23	10/18/22 21:23	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1945301	20000	10/19/22 19:23	10/19/22 19:23	DAH	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chad A Upchurch
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Tr

⁶ Sr

⁷ Qc

⁸ Gl

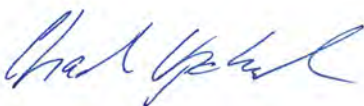
⁹ Al

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This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Chad A Upchurch
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 10/20/2022 11:27					
Project Name: Levey Well		Laboratory Job Number: L1546950-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1944038, WG1944614 and WG1945301					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?		X			1
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National			LRC Date: 10/20/2022 11:27				
Project Name: Levey Well			Laboratory Job Number: L1546950-01				
Reviewer Name: Chad A Upchurch			Prep Batch Number(s): WG1944038, WG1944614 and WG1945301				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 10/20/2022 11:27	
Project Name: Levey Well		Laboratory Job Number: L1546950-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1944038, WG1944614 and WG1945301	
ER #¹	Description		
1	TO-15 WG1944038 Chloroethane: Relative Percent Difference is outside of established control limits.		
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

Collected date/time: 10/14/22 11:36

L1546950

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	250	594	9230	21900		200	WG1944038
Allyl chloride	107-05-1	76.53	40.0	125	ND	ND		200	WG1944038
Benzene	71-43-2	78.10	40.0	128	ND	ND		200	WG1944038
Benzyl Chloride	100-44-7	127	40.0	208	ND	ND		200	WG1944038
Bromodichloromethane	75-27-4	164	40.0	268	ND	ND		200	WG1944038
Bromoform	75-25-2	253	120	1240	ND	ND		200	WG1944038
Bromomethane	74-83-9	94.90	40.0	155	ND	ND		200	WG1944038
1,3-Butadiene	106-99-0	54.10	400	885	ND	ND		200	WG1944038
Carbon disulfide	75-15-0	76.10	40.0	124	58.0	181		200	WG1944038
Carbon tetrachloride	56-23-5	154	40.0	252	ND	ND		200	WG1944038
Chlorobenzene	108-90-7	113	40.0	185	ND	ND		200	WG1944038
Chloroethane	75-00-3	64.50	40.0	106	ND	ND	J3	200	WG1944038
Chloroform	67-66-3	119	40.0	195	ND	ND		200	WG1944038
Chloromethane	74-87-3	50.50	40.0	82.6	ND	ND		200	WG1944038
2-Chlorotoluene	95-49-8	126	40.0	206	ND	ND		200	WG1944038
Cyclohexane	110-82-7	84.20	400	1380	35200	121000		2000	WG1944614
Dibromochloromethane	124-48-1	208	40.0	340	ND	ND		200	WG1944038
1,2-Dibromoethane	106-93-4	188	40.0	308	ND	ND		200	WG1944038
1,2-Dichlorobenzene	95-50-1	147	40.0	240	ND	ND		200	WG1944038
1,3-Dichlorobenzene	541-73-1	147	40.0	240	ND	ND		200	WG1944038
1,4-Dichlorobenzene	106-46-7	147	40.0	240	ND	ND		200	WG1944038
1,2-Dichloroethane	107-06-2	99	40.0	162	ND	ND		200	WG1944038
1,1-Dichloroethane	75-34-3	98	40.0	160	ND	ND		200	WG1944038
1,1-Dichloroethene	75-35-4	96.90	40.0	159	41.0	162		200	WG1944038
cis-1,2-Dichloroethene	156-59-2	96.90	40.0	159	ND	ND		200	WG1944038
trans-1,2-Dichloroethene	156-60-5	96.90	40.0	159	ND	ND		200	WG1944038
1,2-Dichloropropane	78-87-5	113	40.0	185	ND	ND		200	WG1944038
cis-1,3-Dichloropropene	10061-01-5	111	40.0	182	ND	ND		200	WG1944038
trans-1,3-Dichloropropene	10061-02-6	111	40.0	182	ND	ND		200	WG1944038
1,4-Dioxane	123-91-1	88.10	40.0	144	ND	ND		200	WG1944038
Ethanol	64-17-5	46.10	250	471	1060	2000		200	WG1944038
Ethylbenzene	100-41-4	106	40.0	173	ND	ND		200	WG1944038
4-Ethyltoluene	622-96-8	120	40.0	196	ND	ND		200	WG1944038
Trichlorofluoromethane	75-69-4	137.40	40.0	225	ND	ND		200	WG1944038
Dichlorodifluoromethane	75-71-8	120.92	40.0	198	ND	ND		200	WG1944038
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	40.0	307	ND	ND		200	WG1944038
1,2-Dichlorotetrafluoroethane	76-14-2	171	40.0	280	ND	ND		200	WG1944038
Heptane	142-82-5	100	400	1640	47100	193000		2000	WG1944614
Hexachloro-1,3-butadiene	87-68-3	261	126	1350	ND	ND		200	WG1944038
n-Hexane	110-54-3	86.20	12600	44400	808000	2850000		20000	WG1945301
Isopropylbenzene	98-82-8	120.20	40.0	197	ND	ND		200	WG1944038
Methylene Chloride	75-09-2	84.90	40.0	139	ND	ND		200	WG1944038
Methyl Butyl Ketone	591-78-6	100	250	1020	ND	ND		200	WG1944038
2-Butanone (MEK)	78-93-3	72.10	250	737	3010	8880		200	WG1944038
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	250	1020	ND	ND		200	WG1944038
Methyl methacrylate	80-62-6	100.12	40.0	164	ND	ND		200	WG1944038
MTBE	1634-04-4	88.10	40.0	144	ND	ND		200	WG1944038
Naphthalene	91-20-3	128	126	660	ND	ND		200	WG1944038
2-Propanol	67-63-0	60.10	250	615	2640	6490		200	WG1944038
Propene	115-07-1	42.10	250	430	ND	ND		200	WG1944038
Styrene	100-42-5	104	40.0	170	ND	ND		200	WG1944038
1,1,2,2-Tetrachloroethane	79-34-5	168	40.0	275	ND	ND		200	WG1944038
Tetrachloroethylene	127-18-4	166	40.0	272	ND	ND		200	WG1944038
Tetrahydrofuran	109-99-9	72.10	40.0	118	ND	ND		200	WG1944038
Toluene	108-88-3	92.10	100	377	ND	ND		200	WG1944038
1,2,4-Trichlorobenzene	120-82-1	181	126	933	ND	ND		200	WG1944038



Collected date/time: 10/14/22 11:36

L1546950

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	40.0	218	ND	ND		200	WG1944038
1,1,2-Trichloroethane	79-00-5	133	40.0	218	ND	ND		200	WG1944038
Trichloroethylene	79-01-6	131	40.0	214	ND	ND		200	WG1944038
1,2,4-Trimethylbenzene	95-63-6	120	40.0	196	ND	ND		200	WG1944038
1,3,5-Trimethylbenzene	108-67-8	120	40.0	196	ND	ND		200	WG1944038
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	ND	ND		200	WG1944038
Vinyl chloride	75-01-4	62.50	40.0	102	ND	ND		200	WG1944038
Vinyl Bromide	593-60-2	106.95	40.0	175	ND	ND		200	WG1944038
Vinyl acetate	108-05-4	86.10	40.0	141	ND	ND		200	WG1944038
m&p-Xylene	1330-20-7	106	80.0	347	ND	ND		200	WG1944038
o-Xylene	95-47-6	106	40.0	173	ND	ND		200	WG1944038
TPH (GC/MS) Low Fraction	8006-61-9	101	40000	165000	967000	3990000		200	WG1944038
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1944038
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		90.0				WG1944614
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		91.3				WG1945301

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Volatile Organic Compounds (MS) by Method TO-15

L1546950-01

Method Blank (MB)

(MB) R3849379-3 10/17/22 10:46

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3849379-3 10/17/22 10:46

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.218	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	96.5			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849379-1 10/17/22 09:24 • (LCSD) R3849379-2 10/17/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.31	4.37	115	117	70.0-130			1.38	25
Allyl Chloride	3.75	4.35	4.44	116	118	70.0-130			2.05	25
Benzene	3.75	4.23	4.28	113	114	70.0-130			1.18	25
Benzyl Chloride	3.75	4.15	4.24	111	113	70.0-152			2.15	25
Bromodichloromethane	3.75	4.20	4.24	112	113	70.0-130			0.948	25
Bromoform	3.75	4.00	4.06	107	108	70.0-130			1.49	25
Bromomethane	3.75	3.61	3.56	96.3	94.9	70.0-130			1.39	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849379-1 10/17/22 09:24 • (LCSD) R3849379-2 10/17/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,3-Butadiene	3.75	3.56	3.47	94.9	92.5	70.0-130			2.56	25
Carbon disulfide	3.75	4.32	4.40	115	117	70.0-130			1.83	25
Carbon tetrachloride	3.75	4.18	4.26	111	114	70.0-130			1.90	25
Chlorobenzene	3.75	4.33	4.36	115	116	70.0-130			0.690	25
Chloroethane	3.75	4.51	3.21	120	85.6	70.0-130		J3	33.7	25
Chloroform	3.75	4.18	4.26	111	114	70.0-130			1.90	25
Chloromethane	3.75	4.36	4.45	116	119	70.0-130			2.04	25
2-Chlorotoluene	3.75	4.22	4.26	113	114	70.0-130			0.943	25
Dibromochloromethane	3.75	4.25	4.26	113	114	70.0-130			0.235	25
1,2-Dibromoethane	3.75	4.35	4.34	116	116	70.0-130			0.230	25
1,2-Dichlorobenzene	3.75	4.06	4.13	108	110	70.0-130			1.71	25
1,3-Dichlorobenzene	3.75	4.15	4.23	111	113	70.0-130			1.91	25
1,4-Dichlorobenzene	3.75	4.28	4.38	114	117	70.0-130			2.31	25
1,2-Dichloroethane	3.75	4.18	4.20	111	112	70.0-130			0.477	25
1,1-Dichloroethane	3.75	4.33	4.37	115	117	70.0-130			0.920	25
1,1-Dichloroethene	3.75	4.31	4.40	115	117	70.0-130			2.07	25
cis-1,2-Dichloroethene	3.75	4.31	4.35	115	116	70.0-130			0.924	25
trans-1,2-Dichloroethene	3.75	4.31	4.39	115	117	70.0-130			1.84	25
1,2-Dichloropropane	3.75	4.29	4.33	114	115	70.0-130			0.928	25
cis-1,3-Dichloropropene	3.75	4.19	4.23	112	113	70.0-130			0.950	25
trans-1,3-Dichloropropene	3.75	4.16	4.23	111	113	70.0-130			1.67	25
1,4-Dioxane	3.75	3.70	3.73	98.7	99.5	70.0-140			0.808	25
Ethanol	3.75	3.96	4.05	106	108	55.0-148			2.25	25
Ethylbenzene	3.75	4.26	4.32	114	115	70.0-130			1.40	25
4-Ethyltoluene	3.75	4.17	4.21	111	112	70.0-130			0.955	25
Trichlorofluoromethane	3.75	4.26	4.30	114	115	70.0-130			0.935	25
Dichlorodifluoromethane	3.75	4.28	4.35	114	116	64.0-139			1.62	25
1,1,2-Trichlorotrifluoroethane	3.75	4.30	4.34	115	116	70.0-130			0.926	25
1,2-Dichlorotetrafluoroethane	3.75	4.27	4.33	114	115	70.0-130			1.40	25
Hexachloro-1,3-butadiene	3.75	3.58	3.69	95.5	98.4	70.0-151			3.03	25
Isopropylbenzene	3.75	4.09	4.12	109	110	70.0-130			0.731	25
Methylene Chloride	3.75	4.36	4.45	116	119	70.0-130			2.04	25
Methyl Butyl Ketone	3.75	4.01	4.05	107	108	70.0-149			0.993	25
Methyl Ethyl Ketone	3.75	4.30	4.40	115	117	70.0-130			2.30	25
4-Methyl-2-pentanone (MIBK)	3.75	4.28	4.31	114	115	70.0-139			0.698	25
Methyl Methacrylate	3.75	4.39	4.39	117	117	70.0-130			0.000	25
MTBE	3.75	4.21	4.25	112	113	70.0-130			0.946	25
Naphthalene	3.75	3.60	3.72	96.0	99.2	70.0-159			3.28	25
2-Propanol	3.75	4.13	4.18	110	111	70.0-139			1.20	25
Propene	3.75	4.29	4.36	114	116	64.0-144			1.62	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1546950-01

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3849379-1 10/17/22 09:24 • (LCSD) R3849379-2 10/17/22 10:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Styrene	3.75	4.22	4.25	113	113	70.0-130			0.708	25
1,1,2,2-Tetrachloroethane	3.75	4.24	4.29	113	114	70.0-130			1.17	25
Tetrachloroethylene	3.75	3.98	4.06	106	108	70.0-130			1.99	25
Tetrahydrofuran	3.75	4.41	4.54	118	121	70.0-137			2.91	25
Toluene	3.75	4.10	4.14	109	110	70.0-130			0.971	25
1,2,4-Trichlorobenzene	3.75	3.53	3.66	94.1	97.6	70.0-160			3.62	25
1,1,1-Trichloroethane	3.75	4.20	4.27	112	114	70.0-130			1.65	25
1,1,2-Trichloroethane	3.75	4.11	4.25	110	113	70.0-130			3.35	25
Trichloroethylene	3.75	4.14	4.17	110	111	70.0-130			0.722	25
1,2,4-Trimethylbenzene	3.75	4.12	4.19	110	112	70.0-130			1.68	25
1,3,5-Trimethylbenzene	3.75	4.14	4.21	110	112	70.0-130			1.68	25
2,2,4-Trimethylpentane	3.75	4.32	4.40	115	117	70.0-130			1.83	25
Vinyl chloride	3.75	4.03	4.04	107	108	70.0-130			0.248	25
Vinyl Bromide	3.75	4.26	4.31	114	115	70.0-130			1.17	25
Vinyl acetate	3.75	4.27	4.35	114	116	70.0-130			1.86	25
m&p-Xylene	7.50	8.31	8.39	111	112	70.0-130			0.958	25
o-Xylene	3.75	4.05	4.07	108	109	70.0-130			0.493	25
TPH (GC/MS) Low Fraction	203	225	227	111	112	70.0-130			0.885	25
(S) 1,4-Bromofluorobenzene				98.5	98.0	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1546950-01](#)

Method Blank (MB)

(MB) R3850027-3 10/18/22 10:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
(S) 1,4-Bromofluorobenzene	90.7			60.0-140

Method Blank (MB)

(MB) R3850314-3 10/19/22 09:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
(S) 1,4-Bromofluorobenzene	92.1			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3850027-1 10/18/22 09:01 • (LCSD) R3850027-2 10/18/22 09:32

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Cyclohexane	3.75	3.94	3.95	105	105	70.0-130			0.253	25
Heptane	3.75	4.15	4.13	111	110	70.0-130			0.483	25
(S) 1,4-Bromofluorobenzene				93.3	94.0	60.0-140				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3850314-1 10/19/22 08:26 • (LCSD) R3850314-2 10/19/22 08:57

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Cyclohexane	3.75	4.21	4.20	112	112	70.0-130			0.238	25
Heptane	3.75	4.04	4.05	108	108	70.0-130			0.247	25
(S) 1,4-Bromofluorobenzene				94.9	95.1	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1546950-01](#)

Method Blank (MB)

(MB) R3850515-3 10/19/22 10:02

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	87.2			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3850515-1 10/19/22 08:39 • (LCSD) R3850515-2 10/19/22 09:21

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	4.56	4.58	122	122	70.0-130			0.438	25
(S) 1,4-Bromofluorobenzene				94.1	93.8	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.

1Cp

2Tc

3Ss

4Cn

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6Sr

7Qc

8Gl

9Al

10Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Released to Imaging: 2/29/2024 4:01:14 PM



ANALYTICAL REPORT

October 26, 2022

Ensolum, LLC

Sample Delivery Group: L1549114
Samples Received: 10/21/2022
Project Number: 0381417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

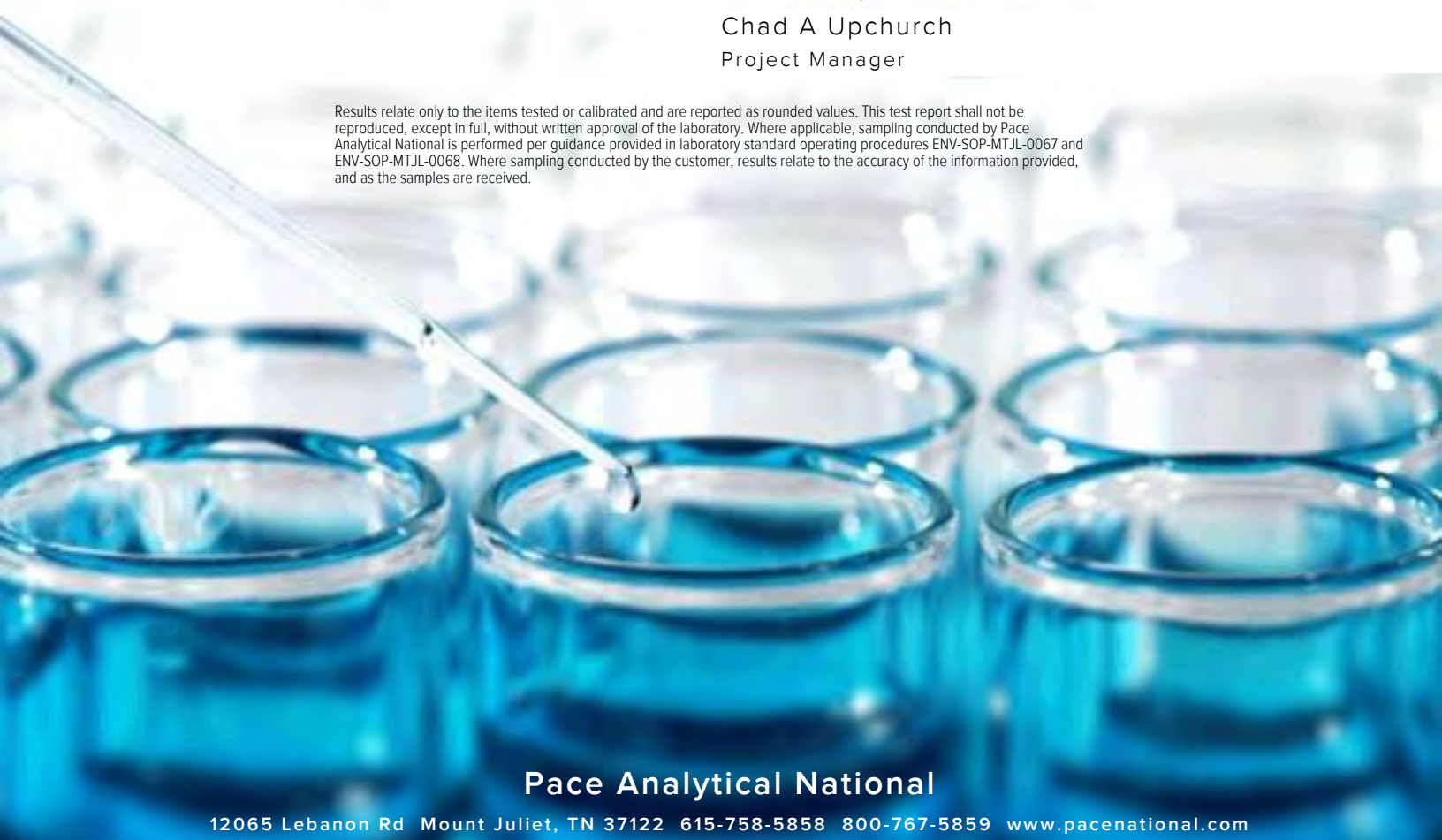


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "Chad Upchurch".

Chad A Upchurch
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1549114-01	9	⁶ Sr
Qc: Quality Control Summary	11	⁷ Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Gl: Glossary of Terms	17	⁸ Gl
Al: Accreditations & Locations	18	
Sc: Sample Chain of Custody	19	⁹ Al
		¹⁰ Sc

LEVEY WELL L1549114-01 Air

Collected by
Shane Diller

Collected date/time
10/19/22 13:50

Received date/time
10/21/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1948096	100	10/24/22 16:33	10/24/22 16:33	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1948589	2000	10/26/22 00:55	10/26/22 00:55	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1949197	40000	10/26/22 14:36	10/26/22 14:36	CEP	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chad A Upchurch
Project Manager

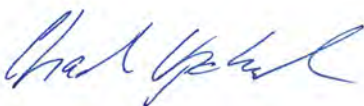
- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Chad A Upchurch
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 10/26/2022 18:39					
Project Name: Levey Well		Laboratory Job Number: L1549114-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1948096, WG1948589 and WG1949197					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 10/26/2022 18:39					
Project Name: Levey Well		Laboratory Job Number: L1549114-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1948096, WG1948589 and WG1949197					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 10/26/2022 18:39	
Project Name: Levey Well		Laboratory Job Number: L1549114-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1948096, WG1948589 and WG1949197	
ER #¹	Description		
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.			
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

Collected date/time: 10/19/22 13:50

L1549114

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	125	297	4460	10600		100	WG1948096
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1948096
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1948096
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1948096
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1948096
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1948096
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1948096
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1948096
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1948096
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1948096
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1948096
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1948096
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1948096
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1948096
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1948096
Cyclohexane	110-82-7	84.20	400	1380	111000	382000		2000	WG1948589
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1948096
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1948096
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1948096
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1948096
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1948096
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1948096
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1948096
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1948096
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1948096
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1948096
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1948096
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1948096
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1948096
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1948096
Ethanol	64-17-5	46.10	125	236	ND	ND		100	WG1948096
Ethylbenzene	100-41-4	106	20.0	86.7	ND	ND		100	WG1948096
4-Ethyltoluene	622-96-8	120	20.0	98.2	ND	ND		100	WG1948096
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1948096
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1948096
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1948096
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1948096
Heptane	142-82-5	100	400	1640	188000	769000		2000	WG1948589
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1948096
n-Hexane	110-54-3	86.20	25200	88800	1780000	6280000		40000	WG1949197
Isopropylbenzene	98-82-8	120.20	20.0	98.3	ND	ND		100	WG1948096
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1948096
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1948096
2-Butanone (MEK)	78-93-3	72.10	125	369	3110	9170		100	WG1948096
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1948096
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1948096
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1948096
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1948096
2-Propanol	67-63-0	60.10	125	307	2520	6190		100	WG1948096
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1948096
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1948096
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1948096
Tetrachloroethylene	127-18-4	166	20.0	136	112	760		100	WG1948096
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1948096
Toluene	108-88-3	92.10	50.0	188	ND	ND		100	WG1948096
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1948096



Collected date/time: 10/19/22 13:50

L1549114

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	20.0	109	ND	ND		100	WG1948096
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1948096
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG1948096
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	ND	ND		100	WG1948096
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	ND	ND		100	WG1948096
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1948096
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1948096
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1948096
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1948096
m&p-Xylene	1330-20-7	106	40.0	173	ND	ND		100	WG1948096
o-Xylene	95-47-6	106	20.0	86.7	ND	ND		100	WG1948096
TPH (GC/MS) Low Fraction	8006-61-9	101	400000	1650000	5460000	22600000		2000	WG1948589
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		107				WG1948096
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.3				WG1948589
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.8				WG1949197

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Method Blank (MB)

(MB) R3852324-2 10/24/22 10:51

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	0.111	U	0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	0.105	U	0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1549114-01

Method Blank (MB)

(MB) R3852324-2 10/24/22 10:51

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.227	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	0.179	U	0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	96.5			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852324-1 10/24/22 10:09 • (LCSD) R3852324-3 10/24/22 11:45

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.53	4.44	121	118	70.0-130			2.01	25
Allyl Chloride	3.75	4.28	4.36	114	116	70.0-130			1.85	25
Benzene	3.75	4.33	4.32	115	115	70.0-130			0.231	25
Benzyl Chloride	3.75	4.64	4.43	124	118	70.0-152			4.63	25
Bromodichloromethane	3.75	4.37	4.36	117	116	70.0-130			0.229	25
Bromoform	3.75	4.13	4.11	110	110	70.0-130			0.485	25
Bromomethane	3.75	4.36	4.34	116	116	70.0-130			0.460	25
1,3-Butadiene	3.75	4.29	4.23	114	113	70.0-130			1.41	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852324-1 10/24/22 10:09 • (LCSD) R3852324-3 10/24/22 11:45

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	3.75	4.31	4.22	115	113	70.0-130			2.11	25
Carbon tetrachloride	3.75	4.33	4.29	115	114	70.0-130			0.928	25
Chlorobenzene	3.75	4.33	4.26	115	114	70.0-130			1.63	25
Chloroethane	3.75	4.87	4.70	130	125	70.0-130			3.55	25
Chloroform	3.75	4.31	4.32	115	115	70.0-130			0.232	25
Chloromethane	3.75	4.43	4.41	118	118	70.0-130			0.452	25
2-Chlorotoluene	3.75	4.50	4.37	120	117	70.0-130			2.93	25
Dibromochloromethane	3.75	4.27	4.23	114	113	70.0-130			0.941	25
1,2-Dibromoethane	3.75	4.40	4.23	117	113	70.0-130			3.94	25
1,2-Dichlorobenzene	3.75	4.33	4.27	115	114	70.0-130			1.40	25
1,3-Dichlorobenzene	3.75	4.46	4.31	119	115	70.0-130			3.42	25
1,4-Dichlorobenzene	3.75	4.68	4.54	125	121	70.0-130			3.04	25
1,2-Dichloroethane	3.75	4.52	4.46	121	119	70.0-130			1.34	25
1,1-Dichloroethane	3.75	4.49	4.31	120	115	70.0-130			4.09	25
1,1-Dichloroethene	3.75	4.50	4.37	120	117	70.0-130			2.93	25
cis-1,2-Dichloroethene	3.75	4.45	4.42	119	118	70.0-130			0.676	25
trans-1,2-Dichloroethene	3.75	4.49	4.33	120	115	70.0-130			3.63	25
1,2-Dichloropropane	3.75	4.38	4.38	117	117	70.0-130			0.000	25
cis-1,3-Dichloropropene	3.75	4.28	4.27	114	114	70.0-130			0.234	25
trans-1,3-Dichloropropene	3.75	4.44	4.37	118	117	70.0-130			1.59	25
1,4-Dioxane	3.75	4.25	4.24	113	113	70.0-140			0.236	25
Ethanol	3.75	5.07	5.01	135	134	55.0-148			1.19	25
Ethylbenzene	3.75	4.21	4.20	112	112	70.0-130			0.238	25
4-Ethyltoluene	3.75	4.40	4.30	117	115	70.0-130			2.30	25
Trichlorofluoromethane	3.75	4.56	4.50	122	120	70.0-130			1.32	25
Dichlorodifluoromethane	3.75	4.53	4.35	121	116	64.0-139			4.05	25
1,1,2-Trichlorotrifluoroethane	3.75	4.39	4.44	117	118	70.0-130			1.13	25
1,2-Dichlorotetrafluoroethane	3.75	4.37	4.34	117	116	70.0-130			0.689	25
Hexachloro-1,3-butadiene	3.75	4.35	4.29	116	114	70.0-151			1.39	25
Isopropylbenzene	3.75	4.19	4.22	112	113	70.0-130			0.713	25
Methylene Chloride	3.75	4.38	4.31	117	115	70.0-130			1.61	25
Methyl Butyl Ketone	3.75	4.83	4.71	129	126	70.0-149			2.52	25
Methyl Ethyl Ketone	3.75	4.40	4.42	117	118	70.0-130			0.454	25
4-Methyl-2-pentanone (MIBK)	3.75	4.78	4.67	127	125	70.0-139			2.33	25
Methyl Methacrylate	3.75	4.66	4.55	124	121	70.0-130			2.39	25
MTBE	3.75	4.46	4.37	119	117	70.0-130			2.04	25
Naphthalene	3.75	4.34	4.18	116	111	70.0-159			3.76	25
2-Propanol	3.75	4.52	4.51	121	120	70.0-139			0.221	25
Propene	3.75	4.60	4.54	123	121	64.0-144			1.31	25
Styrene	3.75	4.38	4.15	117	111	70.0-130			5.39	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852324-1 10/24/22 10:09 • (LCSD) R3852324-3 10/24/22 11:45

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	3.75	4.36	4.32	116	115	70.0-130			0.922	25
Tetrachloroethylene	3.75	4.21	4.24	112	113	70.0-130			0.710	25
Tetrahydrofuran	3.75	4.74	4.56	126	122	70.0-137			3.87	25
Toluene	3.75	4.34	4.32	116	115	70.0-130			0.462	25
1,2,4-Trichlorobenzene	3.75	4.34	4.21	116	112	70.0-160			3.04	25
1,1,1-Trichloroethane	3.75	4.35	4.26	116	114	70.0-130			2.09	25
1,1,2-Trichloroethane	3.75	4.33	4.28	115	114	70.0-130			1.16	25
Trichloroethylene	3.75	4.32	4.32	115	115	70.0-130			0.000	25
1,2,4-Trimethylbenzene	3.75	4.47	4.39	119	117	70.0-130			1.81	25
1,3,5-Trimethylbenzene	3.75	4.45	4.37	119	117	70.0-130			1.81	25
2,2,4-Trimethylpentane	3.75	4.55	4.42	121	118	70.0-130			2.90	25
Vinyl chloride	3.75	4.33	4.20	115	112	70.0-130			3.05	25
Vinyl Bromide	3.75	4.66	4.63	124	123	70.0-130			0.646	25
Vinyl acetate	3.75	4.35	4.46	116	119	70.0-130			2.50	25
m&p-Xylene	7.50	8.55	8.44	114	113	70.0-130			1.29	25
o-Xylene	3.75	4.26	4.15	114	111	70.0-130			2.62	25
(S) 1,4-Bromofluorobenzene				102	99.5	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3852727-3 10/25/22 10:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	97.5			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3852727-1 10/25/22 09:00 • (LCSD) R3852727-2 10/25/22 09:42

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Cyclohexane	3.75	4.20	4.24	112	113	70.0-130			0.948	25
Heptane	3.75	4.34	4.12	116	110	70.0-130			5.20	25
TPH (GC/MS) Low Fraction	203	261	259	129	128	70.0-130			0.769	25
(S) 1,4-Bromofluorobenzene				99.7	97.7	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1549114-01](#)

Method Blank (MB)

(MB) R3853271-3 10/26/22 10:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	94.1			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3853271-1 10/26/22 09:02 • (LCSD) R3853271-2 10/26/22 09:44

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	4.16	4.18	111	111	70.0-130			0.480	25
(S) 1,4-Bromofluorobenzene				97.4	97.8	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

QualifierDescription

J	The identification of the analyte is acceptable; the reported value is an estimate.

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Released to Imaging: 2/29/2024 4:01:14 PM



ANALYTICAL REPORT

November 01, 2022

Ensolum, LLC

Sample Delivery Group: L1551011
Samples Received: 10/27/2022
Project Number: 03B1417001
Description: Levey Well
Site: LEVEY WELL
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

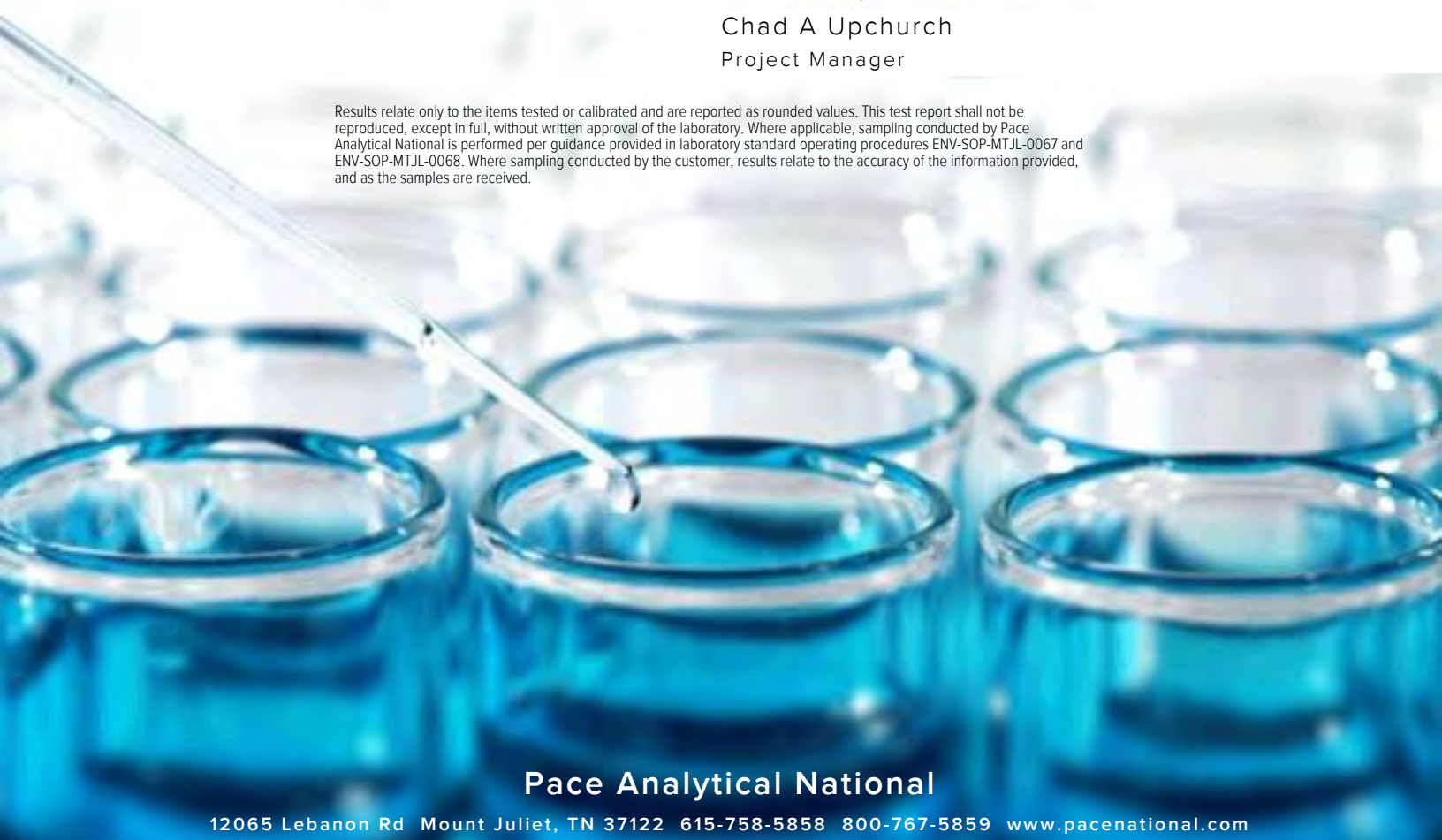


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "Chad Upchurch".

Chad A Upchurch
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1551011-01	9	⁶ Sr
LEVEY WELL L1551011-02	11	
LEVEY WELL L1551011-03	13	⁷ Qc
LEVEY WELL L1551011-04	15	⁸ Gl
Qc: Quality Control Summary	17	
Volatile Organic Compounds (MS) by Method TO-15	17	⁹ Al
Gl: Glossary of Terms	31	
Al: Accreditations & Locations	32	¹⁰ Sc
Sc: Sample Chain of Custody	33	

LEVEY WELL L1551011-01 Air

				Collected by Shane Diller	Collected date/time 10/24/22 11:00	Received date/time 10/27/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1951083	100	10/30/22 01:01	10/30/22 01:01	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1951839	5000	10/31/22 17:22	10/31/22 17:22	SDS	Mt. Juliet, TN

¹Cp

²Tc

³Ss

LEVEY WELL L1551011-02 Air

				Collected by Shane Diller	Collected date/time 10/24/22 12:08	Received date/time 10/27/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1951180	20	10/29/22 23:26	10/29/22 23:26	FKG	Mt. Juliet, TN

⁴Cn

⁵Tr

⁶Sr

LEVEY WELL L1551011-03 Air

				Collected by Shane Diller	Collected date/time 10/24/22 13:08	Received date/time 10/27/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1950569	1	10/28/22 16:13	10/28/22 16:13	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1951091	10	10/29/22 21:19	10/29/22 21:19	FKG	Mt. Juliet, TN

⁷Qc

⁸Gl

⁹Al

LEVEY WELL L1551011-04 Air

				Collected by Shane Diller	Collected date/time 10/24/22 14:08	Received date/time 10/27/22 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1950569	1	10/28/22 16:56	10/28/22 16:56	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1951091	10	10/29/22 21:58	10/29/22 21:58	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1951839	100	10/31/22 18:05	10/31/22 18:05	SDS	Mt. Juliet, TN

¹⁰Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chad A Upchurch
Project Manager

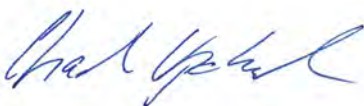
- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Chad A Upchurch
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National			LRC Date: 11/01/2022 18:01				
Project Name: Levey Well			Laboratory Job Number: L1551011-01, 02, 03 and 04				
Reviewer Name: Chad A Upchurch			Prep Batch Number(s): WG1950569, WG1951091, WG1951180, WG1951083 and WG1951839				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 11/01/2022 18:01					
Project Name: Levey Well		Laboratory Job Number: L1551011-01, 02, 03 and 04					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1950569, WG1951091, WG1951180, WG1951083 and WG1951839					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 11/01/2022 18:01	
Project Name: Levey Well		Laboratory Job Number: L1551011-01, 02, 03 and 04	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1950569, WG1951091, WG1951180, WG1951083 and WG1951839	
ER # ¹	Description		
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.			
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

Collected date/time: 10/24/22 11:00

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	125	297	5770	13700		100	WG1951083
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1951083
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1951083
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1951083
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1951083
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1951083
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1951083
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1951083
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1951083
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1951083
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1951083
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1951083
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1951083
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1951083
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1951083
Cyclohexane	110-82-7	84.20	1000	3440	25600	88200		5000	WG1951839
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1951083
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1951083
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1951083
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1951083
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1951083
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1951083
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1951083
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1951083
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1951083
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1951083
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1951083
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1951083
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1951083
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1951083
Ethanol	64-17-5	46.10	125	236	3290	6200		100	WG1951083
Ethylbenzene	100-41-4	106	20.0	86.7	48.6	211		100	WG1951083
4-Ethyltoluene	622-96-8	120	20.0	98.2	69.0	339		100	WG1951083
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1951083
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1951083
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1951083
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1951083
Heptane	142-82-5	100	1000	4090	42500	174000		5000	WG1951839
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1951083
n-Hexane	110-54-3	86.20	3150	11100	292000	1030000		5000	WG1951839
Isopropylbenzene	98-82-8	120.20	20.0	98.3	ND	ND		100	WG1951083
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1951083
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1951083
2-Butanone (MEK)	78-93-3	72.10	125	369	2340	6900		100	WG1951083
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1951083
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1951083
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1951083
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1951083
2-Propanol	67-63-0	60.10	125	307	4990	12300		100	WG1951083
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1951083
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1951083
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1951083
Tetrachloroethylene	127-18-4	166	20.0	136	ND	ND		100	WG1951083
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1951083
Toluene	108-88-3	92.10	50.0	188	271	1020		100	WG1951083
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1951083



Collected date/time: 10/24/22 11:00

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	20.0	109	ND	ND		100	WG1951083
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1951083
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG1951083
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	63.5	312		100	WG1951083
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	46.0	226		100	WG1951083
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1951083
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1951083
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1951083
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1951083
m&p-Xylene	1330-20-7	106	40.0	173	186	806		100	WG1951083
o-Xylene	95-47-6	106	20.0	86.7	63.0	273		100	WG1951083
TPH (GC/MS) Low Fraction	8006-61-9	101	1000000	4130000	ND	ND		5000	WG1951839
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1951083
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.3				WG1951839

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Collected date/time: 10/24/22 12:08

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	25.0	59.4	ND	ND		20	WG1951180
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG1951180
Benzene	71-43-2	78.10	4.00	12.8	4.82	15.4		20	WG1951180
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG1951180
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG1951180
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG1951180
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG1951180
1,3-Butadiene	106-99-0	54.10	40.0	88.5	ND	ND		20	WG1951180
Carbon disulfide	75-15-0	76.10	4.00	12.4	ND	ND		20	WG1951180
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG1951180
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG1951180
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG1951180
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG1951180
Chloromethane	74-87-3	50.50	4.00	8.26	ND	ND		20	WG1951180
2-Chlorotoluene	95-49-8	126	4.00	20.6	ND	ND		20	WG1951180
Cyclohexane	110-82-7	84.20	4.00	13.8	ND	ND		20	WG1951180
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG1951180
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG1951180
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG1951180
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG1951180
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG1951180
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG1951180
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG1951180
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG1951180
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG1951180
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG1951180
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG1951180
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG1951180
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG1951180
1,4-Dioxane	123-91-1	88.10	4.00	14.4	ND	ND		20	WG1951180
Ethanol	64-17-5	46.10	25.0	47.1	110	207		20	WG1951180
Ethylbenzene	100-41-4	106	4.00	17.3	5.10	22.1		20	WG1951180
4-Ethyltoluene	622-96-8	120	4.00	19.6	ND	ND		20	WG1951180
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG1951180
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG1951180
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	4.00	30.7	ND	ND		20	WG1951180
1,2-Dichlorotetrafluoroethane	76-14-2	171	4.00	28.0	ND	ND		20	WG1951180
Heptane	142-82-5	100	4.00	16.4	5.42	22.2		20	WG1951180
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG1951180
n-Hexane	110-54-3	86.20	12.6	44.4	17.8	62.8		20	WG1951180
Isopropylbenzene	98-82-8	120.20	4.00	19.7	ND	ND		20	WG1951180
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG1951180
Methyl Butyl Ketone	591-78-6	100	25.0	102	ND	ND		20	WG1951180
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	ND	ND		20	WG1951180
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	ND	ND		20	WG1951180
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG1951180
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG1951180
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG1951180
2-Propanol	67-63-0	60.10	25.0	61.5	ND	ND		20	WG1951180
Propene	115-07-1	42.10	25.0	43.0	ND	ND		20	WG1951180
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG1951180
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG1951180
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG1951180
Tetrahydrofuran	109-99-9	72.10	4.00	11.8	ND	ND		20	WG1951180
Toluene	108-88-3	92.10	10.0	37.7	25.7	96.8	B	20	WG1951180
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG1951180

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 10/24/22 12:08

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	4.00	21.8	ND	ND		20	WG1951180
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG1951180
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG1951180
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	ND	ND		20	WG1951180
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	ND	ND		20	WG1951180
2,2,4-Trimethylpentane	540-84-1	114.22	4.00	18.7	9.02	42.1		20	WG1951180
Vinyl chloride	75-01-4	62.50	4.00	10.2	ND	ND		20	WG1951180
Vinyl Bromide	593-60-2	106.95	4.00	17.5	ND	ND		20	WG1951180
Vinyl acetate	108-05-4	86.10	4.00	14.1	ND	ND		20	WG1951180
m&p-Xylene	1330-20-7	106	8.00	34.7	9.98	43.3		20	WG1951180
o-Xylene	95-47-6	106	4.00	17.3	4.01	17.4		20	WG1951180
TPH (GC/MS) Low Fraction	8006-61-9	101	4000	16500	ND	ND		20	WG1951180
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.5				WG1951180

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Collected date/time: 10/24/22 13:08

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	41.0	97.4		1	WG1950569
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1950569
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1950569
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1950569
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1950569
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1950569
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1950569
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1950569
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.43	4.45		1	WG1950569
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1950569
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1950569
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1950569
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1950569
Chloromethane	74-87-3	50.50	0.200	0.413	1.00	2.07		1	WG1950569
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1950569
Cyclohexane	110-82-7	84.20	0.200	0.689	43.4	149		1	WG1950569
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1950569
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1950569
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1950569
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1950569
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1950569
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1950569
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1950569
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1950569
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1950569
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1950569
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1950569
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1950569
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1950569
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1950569
Ethanol	64-17-5	46.10	1.25	2.36	30.7	57.9		1	WG1950569
Ethylbenzene	100-41-4	106	0.200	0.867	0.280	1.21		1	WG1950569
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1950569
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1950569
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.496	2.45		1	WG1950569
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1950569
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1950569
Heptane	142-82-5	100	2.00	8.18	108	442		10	WG1951091
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1950569
n-Hexane	110-54-3	86.20	6.30	22.2	367	1290		10	WG1951091
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1950569
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1950569
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1950569
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	20.8	61.3		1	WG1950569
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1950569
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1950569
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1950569
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1950569
2-Propanol	67-63-0	60.10	1.25	3.07	12.6	31.0		1	WG1950569
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1950569
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1950569
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1950569
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1950569
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1950569
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1950569
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1950569

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 10/24/22 13:08

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1950569
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1950569
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1950569
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.481	2.36		1	WG1950569
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.11	5.45		1	WG1950569
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1950569
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1950569
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1950569
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1950569
m&p-Xylene	1330-20-7	106	0.400	1.73	0.891	3.86		1	WG1950569
o-Xylene	95-47-6	106	0.200	0.867	0.352	1.53		1	WG1950569
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	2340	9670		1	WG1950569
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.8				WG1950569
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.7				WG1951091

¹Cp²Tc³Ss⁴Cn⁵Tr⁶Sr⁷Qc⁸Gl⁹Al¹⁰Sc

Collected date/time: 10/24/22 14:08

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	12.5	29.7	141	335		10	WG1951091
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1950569
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1950569
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1950569
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1950569
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1950569
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1950569
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1950569
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1950569
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1950569
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1950569
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1950569
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1950569
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1950569
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1950569
Cyclohexane	110-82-7	84.20	2.00	6.89	660	2270		10	WG1951091
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1950569
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1950569
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1950569
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1950569
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1950569
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1950569
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1950569
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1950569
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1950569
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1950569
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1950569
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1950569
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1950569
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1950569
Ethanol	64-17-5	46.10	1.25	2.36	ND	ND		1	WG1950569
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1950569
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1950569
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1950569
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1950569
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1950569
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1950569
Heptane	142-82-5	100	2.00	8.18	913	3730		10	WG1951091
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1950569
n-Hexane	110-54-3	86.20	63.0	222	5210	18400		100	WG1951839
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1950569
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1950569
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1950569
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	79.5	234		1	WG1950569
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1950569
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1950569
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1950569
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1950569
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1950569
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1950569
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1950569
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1950569
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1950569
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1950569
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1950569
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1950569

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 10/24/22 14:08

L1551011

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1950569
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1950569
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1950569
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.533	2.62		1	WG1950569
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.14	5.60		1	WG1950569
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1950569
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1950569
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1950569
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1950569
m&p-Xylene	1330-20-7	106	0.400	1.73	1.05	4.55		1	WG1950569
o-Xylene	95-47-6	106	0.200	0.867	0.485	2.10		1	WG1950569
TPH (GC/MS) Low Fraction	8006-61-9	101	2000	8260	18000	74400		10	WG1951091
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		106				WG1950569
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.5				WG1951091
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.8				WG1951839

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Tr
- 6 Sr
- 7 Qc
- 8 Gl
- 9 Al
- 10 Sc

Method Blank (MB)

(MB) R3854518-3 10/28/22 10:23

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	0.0992	U	0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	0.0931	U	0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3854518-3 10/28/22 10:23

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	0.183	U	0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	94.8			60.0-140

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Tr

⁶ Sr

⁷ Qc

⁸ Gl

⁹ Al

¹⁰ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854518-1 10/28/22 08:57 • (LCSD) R3854518-2 10/28/22 09:41

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.46	3.48	92.3	92.8	70.0-130			0.576	25
Allyl Chloride	3.75	4.03	3.82	107	102	70.0-130			5.35	25
Benzene	3.75	3.70	3.63	98.7	96.8	70.0-130			1.91	25
Benzyl Chloride	3.75	3.95	3.81	105	102	70.0-152			3.61	25
Bromodichloromethane	3.75	3.77	3.63	101	96.8	70.0-130			3.78	25
Bromoform	3.75	3.78	3.68	101	98.1	70.0-130			2.68	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854518-1 10/28/22 08:57 • (LCSD) R3854518-2 10/28/22 09:41

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	3.75	3.07	3.03	81.9	80.8	70.0-130			1.31	25
1,3-Butadiene	3.75	2.98	2.94	79.5	78.4	70.0-130			1.35	25
Carbon disulfide	3.75	3.66	3.61	97.6	96.3	70.0-130			1.38	25
Carbon tetrachloride	3.75	3.77	3.73	101	99.5	70.0-130			1.07	25
Chlorobenzene	3.75	3.98	3.79	106	101	70.0-130			4.89	25
Chloroethane	3.75	3.00	2.95	80.0	78.7	70.0-130			1.68	25
Chloroform	3.75	3.73	3.63	99.5	96.8	70.0-130			2.72	25
Chloromethane	3.75	3.82	3.67	102	97.9	70.0-130			4.01	25
2-Chlorotoluene	3.75	3.89	3.77	104	101	70.0-130			3.13	25
Cyclohexane	3.75	3.72	3.67	99.2	97.9	70.0-130			1.35	25
Dibromochloromethane	3.75	3.87	3.65	103	97.3	70.0-130			5.85	25
1,2-Dibromoethane	3.75	3.93	3.71	105	98.9	70.0-130			5.76	25
1,2-Dichlorobenzene	3.75	3.89	3.84	104	102	70.0-130			1.29	25
1,3-Dichlorobenzene	3.75	3.86	3.79	103	101	70.0-130			1.83	25
1,4-Dichlorobenzene	3.75	3.89	3.81	104	102	70.0-130			2.08	25
1,2-Dichloroethane	3.75	3.73	3.75	99.5	100	70.0-130			0.535	25
1,1-Dichloroethane	3.75	3.74	3.75	99.7	100	70.0-130			0.267	25
1,1-Dichloroethene	3.75	3.69	3.65	98.4	97.3	70.0-130			1.09	25
cis-1,2-Dichloroethene	3.75	3.78	3.69	101	98.4	70.0-130			2.41	25
trans-1,2-Dichloroethene	3.75	3.75	3.72	100	99.2	70.0-130			0.803	25
1,2-Dichloropropane	3.75	3.91	3.75	104	100	70.0-130			4.18	25
cis-1,3-Dichloropropene	3.75	3.80	3.65	101	97.3	70.0-130			4.03	25
trans-1,3-Dichloropropene	3.75	3.95	3.72	105	99.2	70.0-130			6.00	25
1,4-Dioxane	3.75	3.85	3.81	103	102	70.0-140			1.04	25
Ethanol	3.75	2.86	2.82	76.3	75.2	55.0-148			1.41	25
Ethylbenzene	3.75	3.86	3.79	103	101	70.0-130			1.83	25
4-Ethyltoluene	3.75	3.86	3.78	103	101	70.0-130			2.09	25
Trichlorofluoromethane	3.75	3.20	3.23	85.3	86.1	70.0-130			0.933	25
Dichlorodifluoromethane	3.75	4.02	3.97	107	106	64.0-139			1.25	25
1,1,2-Trichlorotrifluoroethane	3.75	3.75	3.65	100	97.3	70.0-130			2.70	25
1,2-Dichlorotetrafluoroethane	3.75	4.05	4.03	108	107	70.0-130			0.495	25
Hexachloro-1,3-butadiene	3.75	3.95	3.80	105	101	70.0-151			3.87	25
Isopropylbenzene	3.75	3.93	3.79	105	101	70.0-130			3.63	25
Methylene Chloride	3.75	3.71	3.81	98.9	102	70.0-130			2.66	25
Methyl Butyl Ketone	3.75	4.08	3.91	109	104	70.0-149			4.26	25
Methyl Ethyl Ketone	3.75	3.96	3.86	106	103	70.0-130			2.56	25
4-Methyl-2-pentanone (MIBK)	3.75	3.96	3.79	106	101	70.0-139			4.39	25
Methyl Methacrylate	3.75	3.81	3.88	102	103	70.0-130			1.82	25
MTBE	3.75	3.66	3.68	97.6	98.1	70.0-130			0.545	25
Naphthalene	3.75	3.99	3.80	106	101	70.0-159			4.88	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854518-1 10/28/22 08:57 • (LCSD) R3854518-2 10/28/22 09:41

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Propanol	3.75	3.62	3.56	96.5	94.9	70.0-139			1.67	25
Propene	3.75	3.94	3.87	105	103	64.0-144			1.79	25
Styrene	3.75	3.86	3.75	103	100	70.0-130			2.89	25
1,1,2,2-Tetrachloroethane	3.75	3.98	3.77	106	101	70.0-130			5.42	25
Tetrachloroethylene	3.75	3.89	3.67	104	97.9	70.0-130			5.82	25
Tetrahydrofuran	3.75	3.93	3.79	105	101	70.0-137			3.63	25
Toluene	3.75	3.90	3.70	104	98.7	70.0-130			5.26	25
1,2,4-Trichlorobenzene	3.75	3.86	3.83	103	102	70.0-160			0.780	25
1,1,1-Trichloroethane	3.75	3.71	3.68	98.9	98.1	70.0-130			0.812	25
1,1,2-Trichloroethane	3.75	3.94	3.74	105	99.7	70.0-130			5.21	25
Trichloroethylene	3.75	3.73	3.66	99.5	97.6	70.0-130			1.89	25
1,2,4-Trimethylbenzene	3.75	3.81	3.75	102	100	70.0-130			1.59	25
1,3,5-Trimethylbenzene	3.75	3.87	3.71	103	98.9	70.0-130			4.22	25
2,2,4-Trimethylpentane	3.75	3.80	3.76	101	100	70.0-130			1.06	25
Vinyl chloride	3.75	3.15	3.10	84.0	82.7	70.0-130			1.60	25
Vinyl Bromide	3.75	3.14	3.10	83.7	82.7	70.0-130			1.28	25
Vinyl acetate	3.75	3.56	3.82	94.9	102	70.0-130			7.05	25
m&p-Xylene	7.50	7.79	7.61	104	101	70.0-130			2.34	25
o-Xylene	3.75	3.77	3.71	101	98.9	70.0-130			1.60	25
TPH (GC/MS) Low Fraction	203	216	211	106	104	70.0-130			2.34	25
(S) 1,4-Bromofluorobenzene				97.9	96.9	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1551011-01

Method Blank (MB)

(MB) R3854832-3 10/29/22 09:21

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3854832-3 10/29/22 09:21

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.180	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	93.7			60.0-140

1

Cp

2

Tc

3

Ss

4

Cn

5

Tr

6

Sr

7

Qc

8

Gl

9

Al

10

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854832-1 10/29/22 07:55 • (LCSD) R3854832-2 10/29/22 08:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.56	4.52	122	121	70.0-130			0.881	25
Allyl Chloride	3.75	3.89	4.24	104	113	70.0-130			8.61	25
Benzene	3.75	4.16	4.14	111	110	70.0-130			0.482	25
Benzyl Chloride	3.75	4.23	4.18	113	111	70.0-152			1.19	25
Bromodichloromethane	3.75	4.25	4.30	113	115	70.0-130			1.17	25
Bromoform	3.75	4.25	4.12	113	110	70.0-130			3.11	25
Bromomethane	3.75	4.32	4.23	115	113	70.0-130			2.11	25
1,3-Butadiene	3.75	4.29	4.22	114	113	70.0-130			1.65	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854832-1 10/29/22 07:55 • (LCSD) R3854832-2 10/29/22 08:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	3.75	4.34	4.30	116	115	70.0-130			0.926	25
Carbon tetrachloride	3.75	4.32	4.25	115	113	70.0-130			1.63	25
Chlorobenzene	3.75	4.28	4.22	114	113	70.0-130			1.41	25
Chloroethane	3.75	4.22	4.09	113	109	70.0-130			3.13	25
Chloroform	3.75	4.23	4.19	113	112	70.0-130			0.950	25
Chloromethane	3.75	4.09	4.19	109	112	70.0-130			2.42	25
2-Chlorotoluene	3.75	4.35	4.25	116	113	70.0-130			2.33	25
Dibromochloromethane	3.75	4.22	4.24	113	113	70.0-130			0.473	25
1,2-Dibromoethane	3.75	4.39	4.25	117	113	70.0-130			3.24	25
1,2-Dichlorobenzene	3.75	4.32	4.22	115	113	70.0-130			2.34	25
1,3-Dichlorobenzene	3.75	4.30	4.21	115	112	70.0-130			2.12	25
1,4-Dichlorobenzene	3.75	4.27	4.22	114	113	70.0-130			1.18	25
1,2-Dichloroethane	3.75	4.37	4.21	117	112	70.0-130			3.73	25
1,1-Dichloroethane	3.75	4.13	4.14	110	110	70.0-130			0.242	25
1,1-Dichloroethene	3.75	4.30	4.20	115	112	70.0-130			2.35	25
cis-1,2-Dichloroethene	3.75	4.21	4.13	112	110	70.0-130			1.92	25
trans-1,2-Dichloroethene	3.75	4.17	4.21	111	112	70.0-130			0.955	25
1,2-Dichloropropane	3.75	4.12	4.01	110	107	70.0-130			2.71	25
cis-1,3-Dichloropropene	3.75	4.26	4.17	114	111	70.0-130			2.14	25
trans-1,3-Dichloropropene	3.75	4.21	4.11	112	110	70.0-130			2.40	25
1,4-Dioxane	3.75	4.05	4.09	108	109	70.0-140			0.983	25
Ethanol	3.75	4.22	4.11	113	110	55.0-148			2.64	25
Ethylbenzene	3.75	4.30	4.27	115	114	70.0-130			0.700	25
4-Ethyltoluene	3.75	4.41	4.33	118	115	70.0-130			1.83	25
Trichlorofluoromethane	3.75	4.35	4.24	116	113	70.0-130			2.56	25
Dichlorodifluoromethane	3.75	3.46	3.40	92.3	90.7	64.0-139			1.75	25
1,1,2-Trichlorotrifluoroethane	3.75	4.31	4.20	115	112	70.0-130			2.59	25
1,2-Dichlorotetrafluoroethane	3.75	4.31	4.27	115	114	70.0-130			0.932	25
Hexachloro-1,3-butadiene	3.75	4.36	4.30	116	115	70.0-151			1.39	25
Isopropylbenzene	3.75	4.27	4.16	114	111	70.0-130			2.61	25
Methylene Chloride	3.75	4.16	4.12	111	110	70.0-130			0.966	25
Methyl Butyl Ketone	3.75	3.96	3.84	106	102	70.0-149			3.08	25
Methyl Ethyl Ketone	3.75	4.51	4.31	120	115	70.0-130			4.54	25
4-Methyl-2-pentanone (MIBK)	3.75	4.23	4.18	113	111	70.0-139			1.19	25
Methyl Methacrylate	3.75	4.36	4.07	116	109	70.0-130			6.88	25
MTBE	3.75	4.29	4.27	114	114	70.0-130			0.467	25
Naphthalene	3.75	4.52	4.37	121	117	70.0-159			3.37	25
2-Propanol	3.75	4.35	4.26	116	114	70.0-139			2.09	25
Propene	3.75	4.17	4.03	111	107	64.0-144			3.41	25
Styrene	3.75	4.32	4.28	115	114	70.0-130			0.930	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854832-1 10/29/22 07:55 • (LCSD) R3854832-2 10/29/22 08:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	3.75	4.24	4.22	113	113	70.0-130			0.473	25
Tetrachloroethylene	3.75	4.41	4.33	118	115	70.0-130			1.83	25
Tetrahydrofuran	3.75	4.16	4.16	111	111	70.0-137			0.000	25
Toluene	3.75	4.24	4.23	113	113	70.0-130			0.236	25
1,2,4-Trichlorobenzene	3.75	4.64	4.55	124	121	70.0-160			1.96	25
1,1,1-Trichloroethane	3.75	4.24	4.15	113	111	70.0-130			2.15	25
1,1,2-Trichloroethane	3.75	4.27	4.26	114	114	70.0-130			0.234	25
Trichloroethylene	3.75	4.32	4.15	115	111	70.0-130			4.01	25
1,2,4-Trimethylbenzene	3.75	4.43	4.27	118	114	70.0-130			3.68	25
1,3,5-Trimethylbenzene	3.75	4.32	4.24	115	113	70.0-130			1.87	25
2,2,4-Trimethylpentane	3.75	4.20	4.15	112	111	70.0-130			1.20	25
Vinyl chloride	3.75	4.27	4.22	114	113	70.0-130			1.18	25
Vinyl Bromide	3.75	4.36	4.12	116	110	70.0-130			5.66	25
Vinyl acetate	3.75	4.26	4.14	114	110	70.0-130			2.86	25
m&p-Xylene	7.50	8.49	8.45	113	113	70.0-130			0.472	25
o-Xylene	3.75	4.33	4.23	115	113	70.0-130			2.34	25
(S) 1,4-Bromofluorobenzene				98.5	97.3	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3854641-3 10/29/22 09:15

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	93.3			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854641-1 10/29/22 07:54 • (LCSD) R3854641-2 10/29/22 08:36

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.41	4.49	118	120	70.0-130			1.80	25
Cyclohexane	3.75	4.64	4.62	124	123	70.0-130			0.432	25
Heptane	3.75	4.54	4.49	121	120	70.0-130			1.11	25
n-Hexane	3.75	4.66	4.68	124	125	70.0-130			0.428	25
TPH (GC/MS) Low Fraction	203	247	249	122	123	70.0-130			0.806	25
(S) 1,4-Bromofluorobenzene				97.4	97.2	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1551011-02](#)

Method Blank (MB)

(MB) R3854814-3 10/29/22 08:45

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1551011-02

Method Blank (MB)

(MB) R3854814-3 10/29/22 08:45

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.162	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	0.146	U	0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
TPH (GC/MS) Low Fraction	60.3	U	39.7	200
(S) 1,4-Bromofluorobenzene	96.6			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854814-1 10/29/22 07:42 • (LCSD) R3854814-2 10/29/22 08:14

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.15	3.64	111	97.1	70.0-130			13.1	25
Allyl Chloride	3.75	3.70	3.83	98.7	102	70.0-130			3.45	25
Benzene	3.75	3.73	3.82	99.5	102	70.0-130			2.38	25
Benzyl Chloride	3.75	4.21	4.21	112	112	70.0-152			0.000	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854814-1 10/29/22 07:42 • (LCSD) R3854814-2 10/29/22 08:14

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromodichloromethane	3.75	3.89	3.96	104	106	70.0-130			1.78	25
Bromoform	3.75	4.03	4.09	107	109	70.0-130			1.48	25
Bromomethane	3.75	3.65	3.73	97.3	99.5	70.0-130			2.17	25
1,3-Butadiene	3.75	3.67	3.74	97.9	99.7	70.0-130			1.89	25
Carbon disulfide	3.75	3.72	3.80	99.2	101	70.0-130			2.13	25
Carbon tetrachloride	3.75	3.85	3.97	103	106	70.0-130			3.07	25
Chlorobenzene	3.75	3.77	3.98	101	106	70.0-130			5.42	25
Chloroethane	3.75	3.69	3.73	98.4	99.5	70.0-130			1.08	25
Chloroform	3.75	3.76	3.85	100	103	70.0-130			2.37	25
Chloromethane	3.75	3.72	3.83	99.2	102	70.0-130			2.91	25
2-Chlorotoluene	3.75	3.88	3.99	103	106	70.0-130			2.80	25
Cyclohexane	3.75	3.70	3.75	98.7	100	70.0-130			1.34	25
Dibromochloromethane	3.75	3.96	4.04	106	108	70.0-130			2.00	25
1,2-Dibromoethane	3.75	3.81	3.98	102	106	70.0-130			4.36	25
1,2-Dichlorobenzene	3.75	3.92	4.07	105	109	70.0-130			3.75	25
1,3-Dichlorobenzene	3.75	4.14	4.14	110	110	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	4.12	4.18	110	111	70.0-130			1.45	25
1,2-Dichloroethane	3.75	3.78	3.90	101	104	70.0-130			3.13	25
1,1-Dichloroethane	3.75	3.66	3.79	97.6	101	70.0-130			3.49	25
1,1-Dichloroethene	3.75	3.63	3.72	96.8	99.2	70.0-130			2.45	25
cis-1,2-Dichloroethene	3.75	3.74	3.85	99.7	103	70.0-130			2.90	25
trans-1,2-Dichloroethene	3.75	3.70	3.76	98.7	100	70.0-130			1.61	25
1,2-Dichloropropane	3.75	3.76	3.83	100	102	70.0-130			1.84	25
cis-1,3-Dichloropropene	3.75	3.78	3.92	101	105	70.0-130			3.64	25
trans-1,3-Dichloropropene	3.75	3.96	3.98	106	106	70.0-130			0.504	25
1,4-Dioxane	3.75	3.63	3.77	96.8	101	70.0-140			3.78	25
Ethanol	3.75	3.54	3.71	94.4	98.9	55.0-148			4.69	25
Ethylbenzene	3.75	3.85	3.88	103	103	70.0-130			0.776	25
4-Ethyltoluene	3.75	4.00	4.09	107	109	70.0-130			2.22	25
Trichlorofluoromethane	3.75	3.68	3.85	98.1	103	70.0-130			4.52	25
Dichlorodifluoromethane	3.75	3.57	3.74	95.2	99.7	64.0-139			4.65	25
1,1,2-Trichlorotrifluoroethane	3.75	3.68	3.82	98.1	102	70.0-130			3.73	25
1,2-Dichlorotetrafluoroethane	3.75	3.72	3.82	99.2	102	70.0-130			2.65	25
Heptane	3.75	3.80	3.91	101	104	70.0-130			2.85	25
Hexachloro-1,3-butadiene	3.75	3.88	4.05	103	108	70.0-151			4.29	25
n-Hexane	3.75	3.82	3.93	102	105	70.0-130			2.84	25
Isopropylbenzene	3.75	3.91	4.02	104	107	70.0-130			2.77	25
Methylene Chloride	3.75	3.58	3.60	95.5	96.0	70.0-130			0.557	25
Methyl Butyl Ketone	3.75	3.57	3.69	95.2	98.4	70.0-149			3.31	25
Methyl Ethyl Ketone	3.75	3.89	3.96	104	106	70.0-130			1.78	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1551011-02

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3854814-1 10/29/22 07:42 • (LCSD) R3854814-2 10/29/22 08:14

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	3.75	3.72	3.82	99.2	102	70.0-139			2.65	25
Methyl Methacrylate	3.75	3.69	3.83	98.4	102	70.0-130			3.72	25
MTBE	3.75	3.69	3.78	98.4	101	70.0-130			2.41	25
Naphthalene	3.75	3.89	4.09	104	109	70.0-159			5.01	25
2-Propanol	3.75	3.40	3.57	90.7	95.2	70.0-139			4.88	25
Propene	3.75	3.57	3.71	95.2	98.9	64.0-144			3.85	25
Styrene	3.75	3.96	4.04	106	108	70.0-130			2.00	25
1,1,2,2-Tetrachloroethane	3.75	4.01	4.07	107	109	70.0-130			1.49	25
Tetrachloroethylene	3.75	3.85	3.93	103	105	70.0-130			2.06	25
Tetrahydrofuran	3.75	3.78	3.84	101	102	70.0-137			1.57	25
Toluene	3.75	3.83	3.89	102	104	70.0-130			1.55	25
1,2,4-Trichlorobenzene	3.75	3.87	4.01	103	107	70.0-160			3.55	25
1,1,1-Trichloroethane	3.75	3.79	3.87	101	103	70.0-130			2.09	25
1,1,2-Trichloroethane	3.75	3.88	3.96	103	106	70.0-130			2.04	25
Trichloroethylene	3.75	3.83	3.95	102	105	70.0-130			3.08	25
1,2,4-Trimethylbenzene	3.75	4.08	4.16	109	111	70.0-130			1.94	25
1,3,5-Trimethylbenzene	3.75	4.00	4.12	107	110	70.0-130			2.96	25
2,2,4-Trimethylpentane	3.75	3.71	3.86	98.9	103	70.0-130			3.96	25
Vinyl chloride	3.75	3.64	3.79	97.1	101	70.0-130			4.04	25
Vinyl Bromide	3.75	3.68	3.78	98.1	101	70.0-130			2.68	25
Vinyl acetate	3.75	3.90	3.93	104	105	70.0-130			0.766	25
m&p-Xylene	7.50	8.03	8.08	107	108	70.0-130			0.621	25
o-Xylene	3.75	3.96	4.02	106	107	70.0-130			1.50	25
TPH (GC/MS) Low Fraction	203	242	246	119	121	70.0-130			1.64	25
(S) 1,4-Bromofluorobenzene				99.9	102	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1551011-01.04](#)

Method Blank (MB)

(MB) R3855153-3 10/31/22 10:04

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	91.2			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3855153-1 10/31/22 08:37 • (LCSD) R3855153-2 10/31/22 09:21

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyclohexane	3.75	3.53	3.64	94.1	97.1	70.0-130			3.07	25
Heptane	3.75	3.54	3.62	94.4	96.5	70.0-130			2.23	25
n-Hexane	3.75	3.59	3.59	95.7	95.7	70.0-130			0.000	25
TPH (GC/MS) Low Fraction	203	211	212	104	104	70.0-130			0.473	25
(S) 1,4-Bromofluorobenzene				93.9	94.4	60.0-140				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address: <i>Ensolium</i> <i>601 Marionfeld</i> <i>MIDLAND TX 79701</i>			Billing Information:			Analysis			Chain of Custody Page <u> </u> of <u> </u>	
Report to: <i>Beaux Jennings</i>			Email To: <i>bjenningse@ensolium.com</i>			50mg			 ESC L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 	
Project <i>Levey Well</i>			City/State <i>Hobbs NM</i>							
Description:			Lab Project #							
Phone: <i>210 219 8858</i> Fax:			Client Project # <i>03B1417001</i>							
Collected by (print): <i>SHANE DILLER</i>			Site/Facility ID # <i>Levey Well</i>			P.O. # <i>03B1417001</i>			L# <i>U551011</i> C148 Acctnum: <i>ENSOL</i> Template: <i>J186734</i> Prelogin: <i>per57731</i> TSR: <i>C.O.</i> Cooler: <i>10/19/22</i> Shipped Via: Rem./Contaminant Sample # (lab only)	
Collected by (signature): <i>[Signature]</i>			Rush? (Lab MUST Be Notified) ☐ Same Day 200% ☐ Next Day 100% ☐ Two Day 50% ☒ Three Day 25%			Date Results Needed				
			Email? ☐ No ☐ Yes			Canister Pressure/Vacuum				
			FAX? ☐ No ☐ Yes							
Sample ID	Sample Description	Can #	Date	Time	Initial	Final				
	<i>Levey Well</i>	<i>22342</i>	<i>10-24-22</i>	<i>1100</i>	<i>-26</i>	<i>0</i>	<i>X</i>			
	<i>Levey Well</i>	<i>022347</i>	<i>10-24-22</i>	<i>1208</i>	<i>-25</i>	<i>0</i>	<i>X</i>			<i>-01</i>
	<i>Levey Well</i>	<i>010733</i>	<i>10-24-22</i>	<i>1308</i>	<i>-27</i>	<i>0</i>	<i>X</i>			<i>-02</i>
	<i>Levey Well</i>		<i>10-24-22</i>	<i>1408</i>	<i>-25</i>	<i>0</i>				<i>-03</i>
										<i>-04</i>
<i>NOTE</i> <i>5/2</i> <i>10-24-22</i>										
Remarks:										
Relinquished by: (Signature) <i>[Signature]</i>		Date: <i>10/25/22</i>	Time: <i>3:10</i>	Received by: (Signature) <i>[Signature]</i>		Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____		Hold #		
Relinquished by: (Signature) <i>[Signature]</i>		Date: <i>10/25/22</i>	Time: <i>1700</i>	Received by: (Signature) <i>[Signature]</i>		Temp: <i>AMP</i> °C Bottles Received:		Condition: (lab use only)		
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>		Date: <i>10/27/22</i> Time: <i>0900</i>		COC Seal Intact: ☐ Y ☐ N ☐ NA pH Checked: NCF:		



ANALYTICAL REPORT

November 01, 2022

Ensolum, LLC

Sample Delivery Group: L1552006
Samples Received: 10/29/2022
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

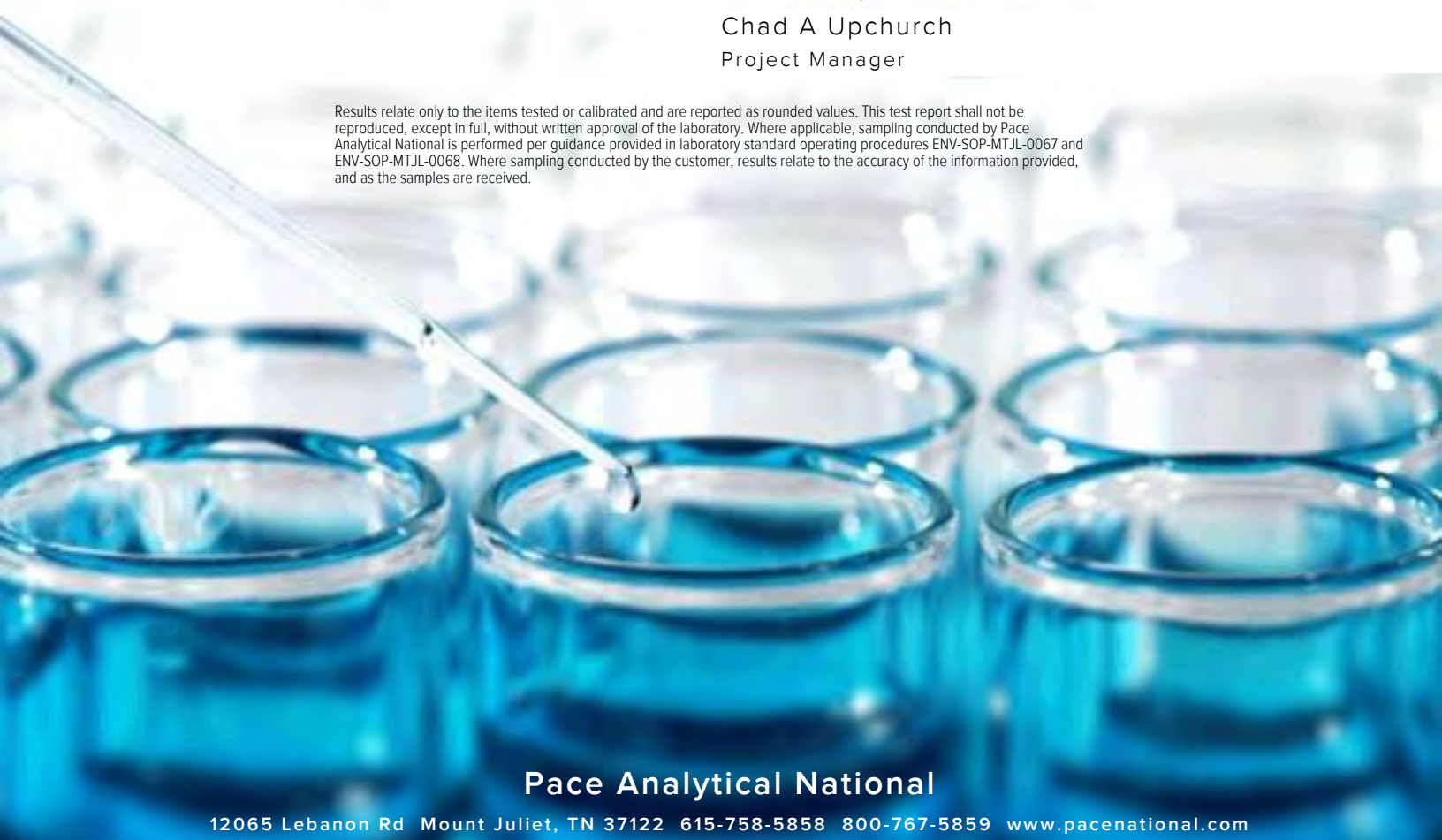


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "Chad Upchurch".

Chad A Upchurch
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1552006-01	9	⁶ Sr
Qc: Quality Control Summary	11	⁷ Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Gl: Glossary of Terms	15	⁸ Gl
Al: Accreditations & Locations	16	
Sc: Sample Chain of Custody	17	⁹ Al
		¹⁰ Sc

LEVEY WELL L1552006-01 Air

Collected by
Shane Diller

Collected date/time
10/27/22 13:37

Received date/time
10/29/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1951887	1000	11/01/22 02:01	11/01/22 02:01	CEP	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chad A Upchurch
Project Manager

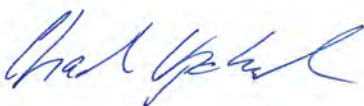
- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

- R1 - Field chain-of-custody documentation;
- R2 - Sample identification cross-reference;
- R3 - Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- R4 - Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- R5 - Test reports/summary forms for blank samples;
- R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.



Chad A Upchurch
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 11/01/2022 11:53					
Project Name: Levey Well		Laboratory Job Number: L1552006-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1951887					
#1	A2	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 11/01/2022 11:53					
Project Name: Levey Well		Laboratory Job Number: L1552006-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1951887					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).							

Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 11/01/2022 11:53	
Project Name: Levey Well		Laboratory Job Number: L1552006-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1951887	
ER # ¹	Description		
The Exception Report intentionally left blank, there are no exceptions applied to this SDG.			
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable); 3. NA = Not applicable; 4. NR = Not reviewed; 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).			

Collected date/time: 10/27/22 13:37

L1552006

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1250	2970	3230	7680		1000	WG1951887
Allyl chloride	107-05-1	76.53	200	626	ND	ND		1000	WG1951887
Benzene	71-43-2	78.10	200	639	ND	ND		1000	WG1951887
Benzyl Chloride	100-44-7	127	200	1040	ND	ND		1000	WG1951887
Bromodichloromethane	75-27-4	164	200	1340	ND	ND		1000	WG1951887
Bromoform	75-25-2	253	600	6210	ND	ND		1000	WG1951887
Bromomethane	74-83-9	94.90	200	776	ND	ND		1000	WG1951887
1,3-Butadiene	106-99-0	54.10	2000	4430	ND	ND		1000	WG1951887
Carbon disulfide	75-15-0	76.10	200	622	ND	ND		1000	WG1951887
Carbon tetrachloride	56-23-5	154	200	1260	ND	ND		1000	WG1951887
Chlorobenzene	108-90-7	113	200	924	ND	ND		1000	WG1951887
Chloroethane	75-00-3	64.50	200	528	ND	ND		1000	WG1951887
Chloroform	67-66-3	119	200	973	ND	ND		1000	WG1951887
Chloromethane	74-87-3	50.50	200	413	ND	ND		1000	WG1951887
2-Chlorotoluene	95-49-8	126	200	1030	ND	ND		1000	WG1951887
Cyclohexane	110-82-7	84.20	200	689	9660	33300		1000	WG1951887
Dibromochloromethane	124-48-1	208	200	1700	ND	ND		1000	WG1951887
1,2-Dibromoethane	106-93-4	188	200	1540	ND	ND		1000	WG1951887
1,2-Dichlorobenzene	95-50-1	147	200	1200	ND	ND		1000	WG1951887
1,3-Dichlorobenzene	541-73-1	147	200	1200	ND	ND		1000	WG1951887
1,4-Dichlorobenzene	106-46-7	147	200	1200	ND	ND		1000	WG1951887
1,2-Dichloroethane	107-06-2	99	200	810	ND	ND		1000	WG1951887
1,1-Dichloroethane	75-34-3	98	200	802	ND	ND		1000	WG1951887
1,1-Dichloroethene	75-35-4	96.90	200	793	ND	ND		1000	WG1951887
cis-1,2-Dichloroethene	156-59-2	96.90	200	793	ND	ND		1000	WG1951887
trans-1,2-Dichloroethene	156-60-5	96.90	200	793	ND	ND		1000	WG1951887
1,2-Dichloropropane	78-87-5	113	200	924	ND	ND		1000	WG1951887
cis-1,3-Dichloropropene	10061-01-5	111	200	908	ND	ND		1000	WG1951887
trans-1,3-Dichloropropene	10061-02-6	111	200	908	ND	ND		1000	WG1951887
1,4-Dioxane	123-91-1	88.10	200	721	ND	ND		1000	WG1951887
Ethanol	64-17-5	46.10	1250	2360	2400	4530		1000	WG1951887
Ethylbenzene	100-41-4	106	200	867	ND	ND		1000	WG1951887
4-Ethyltoluene	622-96-8	120	200	982	ND	ND		1000	WG1951887
Trichlorofluoromethane	75-69-4	137.40	200	1120	ND	ND		1000	WG1951887
Dichlorodifluoromethane	75-71-8	120.92	200	989	ND	ND		1000	WG1951887
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	200	1530	ND	ND		1000	WG1951887
1,2-Dichlorotetrafluoroethane	76-14-2	171	200	1400	ND	ND		1000	WG1951887
Heptane	142-82-5	100	200	818	12000	49100		1000	WG1951887
Hexachloro-1,3-butadiene	87-68-3	261	630	6730	ND	ND		1000	WG1951887
n-Hexane	110-54-3	86.20	630	2220	98700	348000		1000	WG1951887
Isopropylbenzene	98-82-8	120.20	200	983	ND	ND		1000	WG1951887
Methylene Chloride	75-09-2	84.90	200	694	ND	ND		1000	WG1951887
Methyl Butyl Ketone	591-78-6	100	1250	5110	ND	ND		1000	WG1951887
2-Butanone (MEK)	78-93-3	72.10	1250	3690	ND	ND		1000	WG1951887
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1250	5120	ND	ND		1000	WG1951887
Methyl methacrylate	80-62-6	100.12	200	819	ND	ND		1000	WG1951887
MTBE	1634-04-4	88.10	200	721	ND	ND		1000	WG1951887
Naphthalene	91-20-3	128	630	3300	ND	ND		1000	WG1951887
2-Propanol	67-63-0	60.10	1250	3070	7290	17900		1000	WG1951887
Propene	115-07-1	42.10	1250	2150	ND	ND		1000	WG1951887
Styrene	100-42-5	104	200	851	ND	ND		1000	WG1951887
1,1,2,2-Tetrachloroethane	79-34-5	168	200	1370	ND	ND		1000	WG1951887
Tetrachloroethylene	127-18-4	166	200	1360	ND	ND		1000	WG1951887
Tetrahydrofuran	109-99-9	72.10	200	590	ND	ND		1000	WG1951887
Toluene	108-88-3	92.10	500	1880	ND	ND		1000	WG1951887
1,2,4-Trichlorobenzene	120-82-1	181	630	4660	ND	ND		1000	WG1951887



Collected date/time: 10/27/22 13:37

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	200	1090	ND	ND		1000	WG1951887
1,1,2-Trichloroethane	79-00-5	133	200	1090	ND	ND		1000	WG1951887
Trichloroethylene	79-01-6	131	200	1070	ND	ND		1000	WG1951887
1,2,4-Trimethylbenzene	95-63-6	120	200	982	ND	ND		1000	WG1951887
1,3,5-Trimethylbenzene	108-67-8	120	200	982	ND	ND		1000	WG1951887
2,2,4-Trimethylpentane	540-84-1	114.22	200	934	ND	ND		1000	WG1951887
Vinyl chloride	75-01-4	62.50	200	511	ND	ND		1000	WG1951887
Vinyl Bromide	593-60-2	106.95	200	875	ND	ND		1000	WG1951887
Vinyl acetate	108-05-4	86.10	200	704	ND	ND		1000	WG1951887
m&p-Xylene	1330-20-7	106	400	1730	ND	ND		1000	WG1951887
o-Xylene	95-47-6	106	200	867	ND	ND		1000	WG1951887
TPH (GC/MS) Low Fraction	8006-61-9	101	200000	826000	405000	1670000		1000	WG1951887
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.8				WG1951887

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3855312-3 10/31/22 12:12

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1552006-01

Method Blank (MB)

(MB) R3855312-3 10/31/22 12:12

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.261	U	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	95.6			60.0-140

1

Cp

2

Tc

3

Ss

4

Cn

5

Tr

6

Sr

7

Qc

8

Gl

9

Al

10

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3855312-1 10/31/22 08:25 • (LCSD) R3855312-2 10/31/22 09:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.71	3.68	98.9	98.1	70.0-130			0.812	25
Allyl Chloride	3.75	3.83	3.71	102	98.9	70.0-130			3.18	25
Benzene	3.75	3.62	3.62	96.5	96.5	70.0-130			0.000	25
Benzyl Chloride	3.75	3.65	3.61	97.3	96.3	70.0-152			1.10	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3855312-1 10/31/22 08:25 • (LCSD) R3855312-2 10/31/22 09:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	3.75	3.72	3.68	99.2	98.1	70.0-130			1.08	25
Bromoform	3.75	3.66	3.61	97.6	96.3	70.0-130			1.38	25
Bromomethane	3.75	3.52	3.45	93.9	92.0	70.0-130			2.01	25
1,3-Butadiene	3.75	3.72	3.66	99.2	97.6	70.0-130			1.63	25
Carbon disulfide	3.75	3.70	3.69	98.7	98.4	70.0-130			0.271	25
Carbon tetrachloride	3.75	3.60	3.62	96.0	96.5	70.0-130			0.554	25
Chlorobenzene	3.75	3.65	3.62	97.3	96.5	70.0-130			0.825	25
Chloroethane	3.75	3.59	3.53	95.7	94.1	70.0-130			1.69	25
Chloroform	3.75	3.64	3.64	97.1	97.1	70.0-130			0.000	25
Chloromethane	3.75	3.84	3.87	102	103	70.0-130			0.778	25
2-Chlorotoluene	3.75	3.70	3.70	98.7	98.7	70.0-130			0.000	25
Cyclohexane	3.75	3.61	3.64	96.3	97.1	70.0-130			0.828	25
Dibromochloromethane	3.75	3.70	3.67	98.7	97.9	70.0-130			0.814	25
1,2-Dibromoethane	3.75	3.67	3.66	97.9	97.6	70.0-130			0.273	25
1,2-Dichlorobenzene	3.75	3.64	3.62	97.1	96.5	70.0-130			0.551	25
1,3-Dichlorobenzene	3.75	3.62	3.62	96.5	96.5	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	3.73	3.75	99.5	100	70.0-130			0.535	25
1,2-Dichloroethane	3.75	3.73	3.69	99.5	98.4	70.0-130			1.08	25
1,1-Dichloroethane	3.75	3.70	3.70	98.7	98.7	70.0-130			0.000	25
1,1-Dichloroethene	3.75	3.77	3.70	101	98.7	70.0-130			1.87	25
cis-1,2-Dichloroethene	3.75	3.30	3.44	88.0	91.7	70.0-130			4.15	25
trans-1,2-Dichloroethene	3.75	3.76	3.78	100	101	70.0-130			0.531	25
1,2-Dichloropropane	3.75	3.67	3.66	97.9	97.6	70.0-130			0.273	25
cis-1,3-Dichloropropene	3.75	3.61	3.61	96.3	96.3	70.0-130			0.000	25
trans-1,3-Dichloropropene	3.75	3.68	3.60	98.1	96.0	70.0-130			2.20	25
1,4-Dioxane	3.75	3.34	3.35	89.1	89.3	70.0-140			0.299	25
Ethanol	3.75	3.13	3.09	83.5	82.4	55.0-148			1.29	25
Ethylbenzene	3.75	3.59	3.60	95.7	96.0	70.0-130			0.278	25
4-Ethyltoluene	3.75	3.63	3.61	96.8	96.3	70.0-130			0.552	25
Trichlorofluoromethane	3.75	3.65	3.62	97.3	96.5	70.0-130			0.825	25
Dichlorodifluoromethane	3.75	3.71	3.72	98.9	99.2	64.0-139			0.269	25
1,1,2-Trichlorotrifluoroethane	3.75	3.72	3.78	99.2	101	70.0-130			1.60	25
1,2-Dichlorotetrafluoroethane	3.75	3.73	3.77	99.5	101	70.0-130			1.07	25
Heptane	3.75	4.57	4.55	122	121	70.0-130			0.439	25
Hexachloro-1,3-butadiene	3.75	3.75	3.74	100	99.7	70.0-151			0.267	25
n-Hexane	3.75	3.69	3.71	98.4	98.9	70.0-130			0.541	25
Isopropylbenzene	3.75	3.60	3.57	96.0	95.2	70.0-130			0.837	25
Methylene Chloride	3.75	3.69	3.70	98.4	98.7	70.0-130			0.271	25
Methyl Butyl Ketone	3.75	3.80	3.78	101	101	70.0-149			0.528	25
Methyl Ethyl Ketone	3.75	3.51	3.50	93.6	93.3	70.0-130			0.285	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1552006-01

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3855312-1 10/31/22 08:25 • (LCSD) R3855312-2 10/31/22 09:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	3.75	3.77	3.75	101	100	70.0-139			0.532	25
Methyl Methacrylate	3.75	3.59	3.63	95.7	96.8	70.0-130			1.11	25
MTBE	3.75	3.49	3.46	93.1	92.3	70.0-130			0.863	25
Naphthalene	3.75	3.62	3.62	96.5	96.5	70.0-159			0.000	25
2-Propanol	3.75	3.74	3.67	99.7	97.9	70.0-139			1.89	25
Propene	3.75	3.87	3.85	103	103	64.0-144			0.518	25
Styrene	3.75	3.62	3.65	96.5	97.3	70.0-130			0.825	25
1,1,2,2-Tetrachloroethane	3.75	3.65	3.62	97.3	96.5	70.0-130			0.825	25
Tetrachloroethylene	3.75	3.63	3.60	96.8	96.0	70.0-130			0.830	25
Tetrahydrofuran	3.75	3.70	3.69	98.7	98.4	70.0-137			0.271	25
Toluene	3.75	3.59	3.56	95.7	94.9	70.0-130			0.839	25
1,2,4-Trichlorobenzene	3.75	3.57	3.56	95.2	94.9	70.0-160			0.281	25
1,1,1-Trichloroethane	3.75	3.60	3.63	96.0	96.8	70.0-130			0.830	25
1,1,2-Trichloroethane	3.75	3.65	3.63	97.3	96.8	70.0-130			0.549	25
Trichloroethylene	3.75	3.62	3.65	96.5	97.3	70.0-130			0.825	25
1,2,4-Trimethylbenzene	3.75	3.66	3.69	97.6	98.4	70.0-130			0.816	25
1,3,5-Trimethylbenzene	3.75	3.68	3.69	98.1	98.4	70.0-130			0.271	25
2,2,4-Trimethylpentane	3.75	3.66	3.67	97.6	97.9	70.0-130			0.273	25
Vinyl chloride	3.75	3.82	3.82	102	102	70.0-130			0.000	25
Vinyl Bromide	3.75	3.49	3.53	93.1	94.1	70.0-130			1.14	25
Vinyl acetate	3.75	3.28	3.09	87.5	82.4	70.0-130			5.97	25
m&p-Xylene	7.50	7.21	7.25	96.1	96.7	70.0-130			0.553	25
o-Xylene	3.75	3.53	3.54	94.1	94.4	70.0-130			0.283	25
TPH (GC/MS) Low Fraction	203	202	203	99.5	100	70.0-130			0.494	25
(S) 1,4-Bromofluorobenzene				98.4	98.0	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

QualifierDescription

J	The identification of the analyte is acceptable; the reported value is an estimate.

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

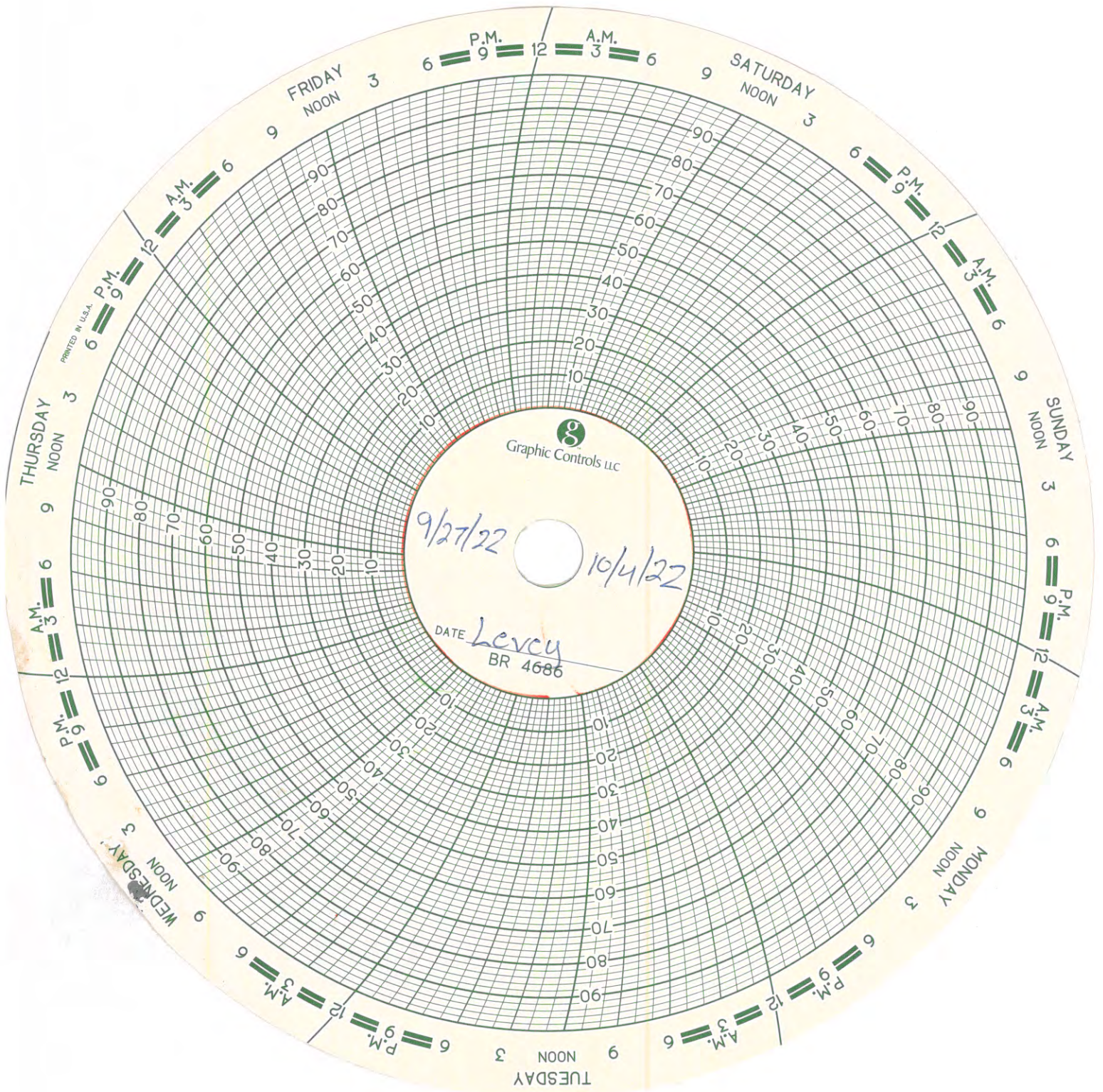


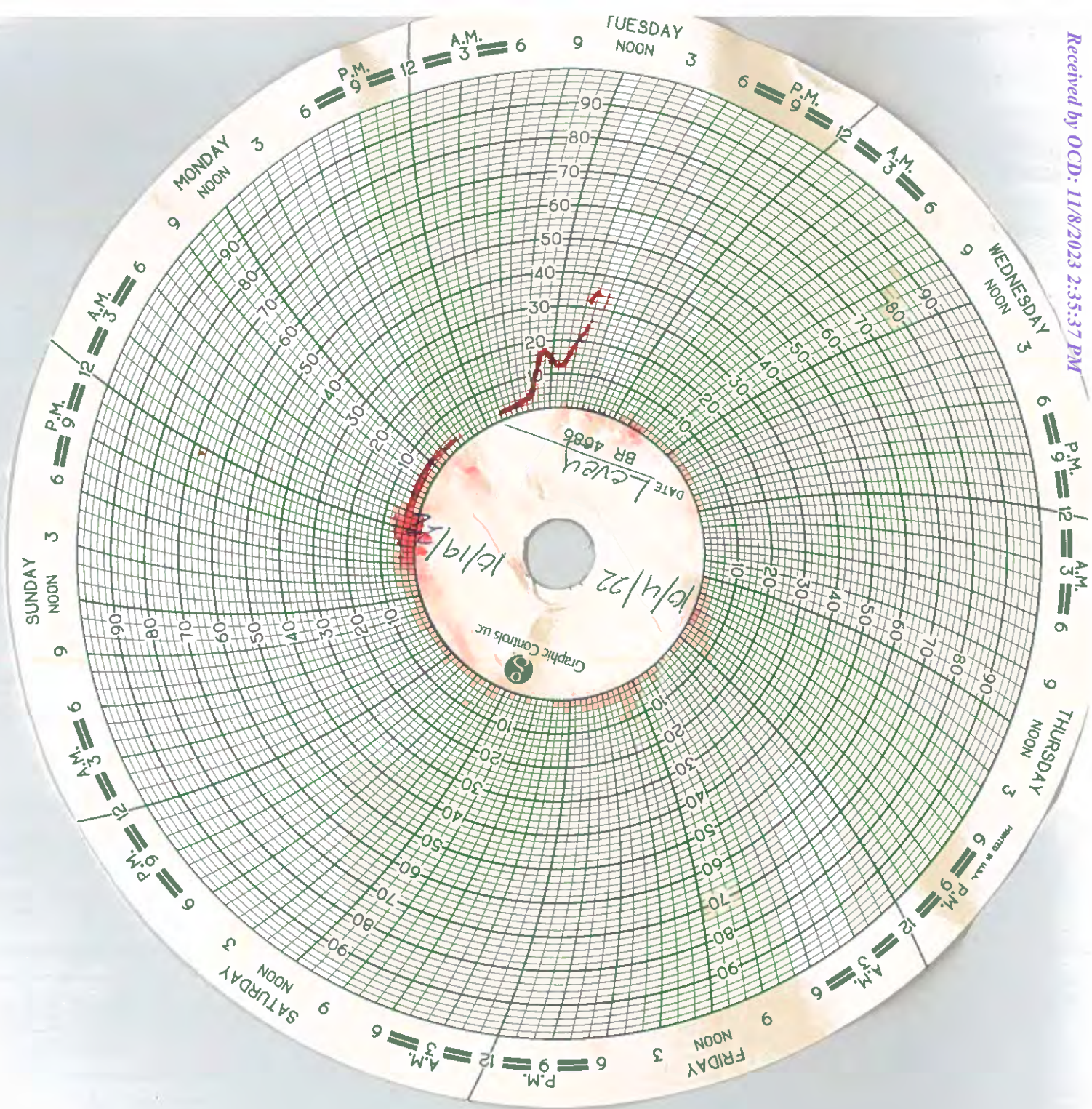
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APPENDIX D

Levey Well Integrity Test Documentation





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 284051

CONDITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 284051
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Accepted for the Record	2/29/2024