



ENSOLUM

GAS MITIGATION MONTHLY REPORT - AUGUST 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**

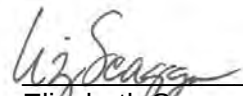
December 6, 2022

Prepared for:

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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 - August 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, and the *Gas Mitigation Monthly Report - July 2022*, dated September 1, 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.

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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 August 31, 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 August 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 0.0162 milligrams per liter (mg/L) to 0.0326 mg/L in monitoring well MW-2. TDS analytical results ranged from 1,160 mg/L to 1,370 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.

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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 9/16/2022, with no pressure observed in either monitoring well. The pressure reading charts available for August 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. As a result of an equipment error, no water volumes for August 2022 were recorded. 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 August 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 September 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 on August 1, 2022, and August 15, 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 August 1, 2022, and August 15, 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 September 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 September 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, ethanol, 4-ethyltoluene, heptane, n-hexane, 2-Butanone (MEK), 2-propanol, tetrachloroethylene, trichloroethylene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and/or o-xylene were observed prior to the initiation of the August 1, 2022 vacuum recovery event and elevated concentrations of carbon disulfide, cyclohexane, ethanol, heptane, n-hexane, methyl methacrylate, 1,3,5-trimethylbenzene, and/or TPH were observed prior to the initiation of the August 15, 2022 vacuum recovery event.

Once initiated, an air sample is taken at one hour and two hours into the vacuum recovery event. During the August 1, 2022, vacuum recovery event, acetone, ethanol, 4-ethyltoluene, heptane, n-hexane, 2-Butanone (MEK), 2-propanol, tetrachloroethylene, trichloroethylene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and/or o-xylene concentrations significantly decrease throughout the duration of the event. During the August 15, 2022, vacuum recovery event, carbon disulfide, cyclohexane, ethanol, heptane, n-hexane, methyl methacrylate, 1,3,5-trimethylbenzene, and/or 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. After the termination of the August 1, 2022, vacuum recovery event, elevated concentrations of acetone, ethanol, 4-ethyltoluene, heptane, n-hexane, 2-Butanone (MEK), 2-propanol, tetrachloroethylene, trichloroethylene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and/or o-xylene begin to accumulate inside the Levey water well casing. After the termination of the August 15, 2022, vacuum recovery event, elevated concentrations of carbon disulfide, cyclohexane, ethanol, heptane, n-hexane, methyl methacrylate, 1,3,5-trimethylbenzene, and/or 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 carbon disulfide, cyclohexane, ethanol, heptane, n-hexane, methylene chloride, 2-Butanone (MEK), 2-propanol 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 August 2022 groundwater samples collected from the Levey Well and monitoring wells MW-1 and MW-2 to the New Mexico WQCC GQSs. 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 GQSs, with the exception of the analytes, as discussed below.

Levey Well

TDS analytical results ranged from 1,160 mg/L to 1,370 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 0.162 mg/L to 0.0326 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.

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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

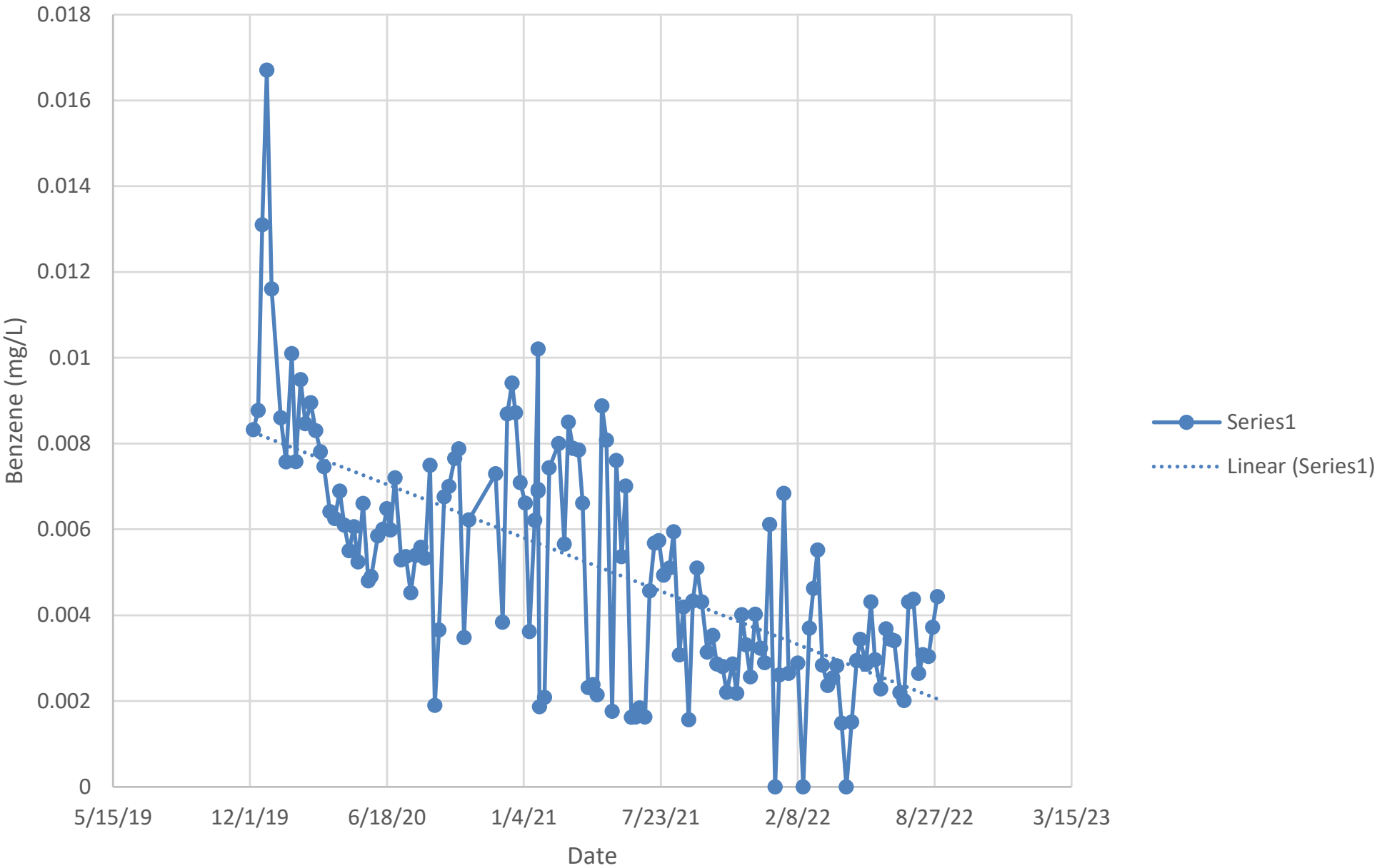
PERMIAN EOR, INC
S HOBBS G/SA UNIT
SE ¼ of the NW ¼, Sec 5, T29S, R38E, Hobbs, New Mexico
32.690683° N, 103.173158° W

PROJECT NUMBER: 03B1417001

FIGURE

1

Levey Well
Benzene Over Time





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	Tetrachloroethy/lene	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	1,2-Dichloropropane	cis-1,2-Dichloroethy/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	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	0.00324	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00191	<0.00100	<0.00500	<0.00100	<0.00100	<0.00500							

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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	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-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	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000744 J	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.00678	<0.00200	0.00340	<0.000228	<0.000623	0.0152	0.00482
	6/23/2022	0.00344	0.0304	0.0149	0.00959	0.0599	0.0695	<0.00270	<0.000286	<0.000199	<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	0.00715	<0.00200	0.00313				

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-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							NA																
	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	0.000230 J	<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	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	0.000253 J	<0.0100	<0.00100	<0.00100	<0.00100	0.00152	<0.00100
	3/31/2021	0.00161	<0.000500	0.000333 J	<0.000192	0.000714 J	0.000714 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.00100	<0.00100	<0.0100	<0.00100	<0.000183	<0.000233	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	<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)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	<0.00500	<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	<0.00100	<0.00100	<0.000259	NA	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500	<0.00500	<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	<0.00200	0.00235	<0.000228	<0.000162	0.0237	<0.000279
	4/15/2021	0.0260	0.0132	0.0236	0.0176	0.129	0.147	<0.00270	<0.000286	<0.000199	<0.000195	<0.000500	<0.000259	<0.000318	<0.000214	<0.000183	0.000925 J	<0.000285	<0.000396	<0.000174	<0.0								

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	ter-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-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	0.005	0.1	NE	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	<0.00286	<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	<0.00286	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	<0.00286	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	0.00120	<0.000285	<0.000396	<0.000174	<0.000199	<0.000481	0.0144	<0.00200	0.00410	<0.000228	<0.000623	0.0464	0.0121
	6/29/2022	0.0119	<0.000500	0.0113	0.00209	0.0579	0.0600	<0.00270																					



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
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															



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
Levey Well	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 Incliment 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



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	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														6.37	
	1/6/2021	NA	325	NA														6.51	
	1/12/2021	NA	359	NA					NA					1,160	<4.00	NA	6.42		
	1/20/2021	NA	353	NA					NA					1,160	<4.00	NA	6.34		
	1/27/2021	NA	334	NA					NA					1,010	<4.00	NA	6.44		
	2/3/2021	NA	368	NA					NA					1,130	<4.00	NA	6.38		
	2/10/2021	NA	339	NA					NA					1,160	<4.00	NA	6.45		
	2/24/2021	NA	343	NA					NA					1,070	<4.00	NA	6.45		
	3/4/2021	NA	339	NA					NA					1,070	<4.00	NA	6.38		
	3/10/2021	NA	324	NA					NA					1,020	<4.00	NA	6.34		
	3/17/2021	NA	330	NA					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 Incliment 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			
	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				



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-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 Incliment 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					
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					



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		



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		

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	7.67	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	6,130	3.68	7.07	1.51	2.64	9.98	157	<0.983	13.5	13.5	115	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	<															

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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	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																																				
		1403	197	<0.639	<0.776	<0.622	<0.413	<1.03	1,050	<0.810	<0.793	18.6	<0.867	7.21	<1.12	<0.989	2,070	15,700	<0.983	<0.694	<5.11	102	<5.12	<0.819	<3.30	113	<0.851	<1.36	<0.590	<1.88	<1.09	<1.07	8.69	17.0	<0.704	3.90	3.65	88,000	
		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	&lt								



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: 880-17778-1

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

Authorized for release by:

8/22/2022 4:36:25 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project
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: Levey Well Hobbs, NM - 03B1417001

Laboratory Job ID: 880-17778-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-17778-1
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
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

Case Narrative

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

Job ID: 880-17778-1
SDG: Hobbs NM

Job ID: 880-17778-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-17778-1

Receipt

The sample was received on 8/4/2022 4:49 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 1.5°C

GC/MS VOA

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-63719 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 native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 860-63766 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Nitrate in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

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 860-63886 and analytical batch 860-64191 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) 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: 880-17778-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-17778-1

Date Collected: 08/04/22 10:40

Matrix: Water

Date Received: 08/04/22 16:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00264		0.00100	0.000533	mg/L		08/05/22 16:05	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		08/05/22 16:05	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		08/05/22 16:05	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		08/05/22 16:05	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		08/05/22 16:05	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		08/05/22 16:05	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		08/05/22 16:05	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		08/05/22 16:05	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		08/05/22 16:05	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		08/05/22 16:05	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		08/05/22 16:05	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		08/05/22 16:05	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		08/05/22 16:05	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		08/05/22 16:05	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		08/05/22 16:05	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		08/05/22 16:05	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		08/05/22 16:05	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		08/05/22 16:05	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		08/05/22 16:05	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		08/05/22 16:05	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/05/22 16:05	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/05/22 16:05	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		08/05/22 16:05	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		08/05/22 16:05	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L		08/05/22 16:05	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L		08/05/22 16:05	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L		08/05/22 16:05	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L		08/05/22 16:05	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L		08/05/22 16:05	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L		08/05/22 16:05	1
Ethylbenzene	0.00908		0.00100	0.000411	mg/L		08/05/22 16:05	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L		08/05/22 16:05	1
Isopropylbenzene	0.00422		0.00100	0.000613	mg/L		08/05/22 16:05	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L		08/05/22 16:05	1
m,p-Xylenes	0.0354		0.0100	0.00124	mg/L		08/05/22 16:05	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L		08/05/22 16:05	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L		08/05/22 16:05	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644	mg/L		08/05/22 16:05	1
N-Propylbenzene	0.00207		0.00100	0.000498	mg/L		08/05/22 16:05	1
o-Xylene	0.00555		0.00100	0.000551	mg/L		08/05/22 16:05	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919	mg/L		08/05/22 16:05	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468	mg/L		08/05/22 16:05	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L		08/05/22 16:05	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L		08/05/22 16:05	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L		08/05/22 16:05	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L		08/05/22 16:05	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L		08/05/22 16:05	1
Toluene	0.0192		0.00100	0.000475	mg/L		08/05/22 16:05	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L		08/05/22 16:05	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-17778-1

Date Collected: 08/04/22 10:40

Matrix: Water

Date Received: 08/04/22 16:49

Method: 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			08/05/22 16:05	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/05/22 16:05	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/05/22 16:05	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/05/22 16:05	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/05/22 16:05	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/05/22 16:05	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/05/22 16:05	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/05/22 16:05	1
1,2,4-Trimethylbenzene	0.00853		0.00100	0.000417 mg/L			08/05/22 16:05	1
1,3,5-Trimethylbenzene	0.00272		0.00100	0.000456 mg/L			08/05/22 16:05	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/05/22 16:05	1
Xylenes, Total	0.0410		0.0100	0.00124 mg/L			08/05/22 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		08/05/22 16:05	1
Dibromofluoromethane (Surr)	106		75 - 131		08/05/22 16:05	1
1,2-Dichloroethane-d4 (Surr)	112		63 - 144		08/05/22 16:05	1
Toluene-d8 (Surr)	103		80 - 117		08/05/22 16:05	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.483	J	0.500	0.0711 mg/L			08/05/22 14:09	1
Nitrate as N	0.236		0.100	0.0391 mg/L			08/05/22 14:09	1
Chloride	211		0.500	0.200 mg/L			08/05/22 14:09	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/05/22 14:09	1
Fluoride	0.453	J	0.500	0.100 mg/L			08/05/22 14:09	1
Sulfate	45.4		0.500	0.109 mg/L			08/05/22 14:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	199		2.00	1.15 mg/L		08/06/22 11:16	08/12/22 23:14	10
Magnesium	39.8		0.200	0.0428 mg/L		08/06/22 11:16	08/08/22 19:48	1
Potassium	3.04		0.500	0.0914 mg/L		08/06/22 11:16	08/08/22 19:48	1
Sodium	65.6		0.500	0.152 mg/L		08/06/22 11:16	08/08/22 19:48	1
SiO2	64.1		1.07	0.471 mg/L		08/06/22 11:16	08/08/22 19:48	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	-13.2			%			08/12/22 16:38	1
Alkalinity	600		4.00	4.00 mg/L			08/06/22 14:07	1
Bicarbonate Alkalinity as CaCO3	600		4.00	4.00 mg/L			08/06/22 14:07	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/06/22 14:07	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/06/22 14:07	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			08/06/22 14:07	1
Total Dissolved Solids	1300		10.0	10.0 mg/L			08/05/22 16:28	1
pH	6.4	HF		SU			08/06/22 11:15	1
Temperature	19.2	HF		Degrees C			08/06/22 11:15	1

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Surrogate Summary

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

Job ID: 880-17778-1
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)
860-30815-C-12 MS	Matrix Spike	104	106	105	100
880-17778-1	Levey Well	102	106	112	103
LCS 860-63719/3	Lab Control Sample	103	107	105	100
LCSD 860-63719/4	Lab Control Sample Dup	101	107	105	100
MB 860-63719/10	Method Blank	103	106	110	103
Surrogate Legend					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
DCA = 1,2-Dichloroethane-d4 (Surr)					
TOL = Toluene-d8 (Surr)					

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

Prep Type: TCLP

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
830-2185-A-1-D MS	Matrix Spike	100	106	105	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: 880-17778-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-63719/10

Matrix: Water

Analysis Batch: 63719

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			08/05/22 10:16	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/05/22 10:16	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/05/22 10:16	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/05/22 10:16	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/05/22 10:16	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/05/22 10:16	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/05/22 10:16	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/05/22 10:16	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/05/22 10:16	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/05/22 10:16	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/05/22 10:16	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/05/22 10:16	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/05/22 10:16	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/05/22 10:16	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/05/22 10:16	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/05/22 10:16	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/05/22 10:16	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/05/22 10:16	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/05/22 10:16	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/05/22 10:16	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 10:16	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 10:16	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 10:16	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/05/22 10:16	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/05/22 10:16	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/05/22 10:16	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/05/22 10:16	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/05/22 10:16	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/05/22 10:16	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/05/22 10:16	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/05/22 10:16	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/05/22 10:16	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/05/22 10:16	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/05/22 10:16	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/05/22 10:16	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/05/22 10:16	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/05/22 10:16	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 10:16	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/05/22 10:16	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/05/22 10:16	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 10:16	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/05/22 10:16	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/05/22 10:16	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/05/22 10:16	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 10:16	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/05/22 10:16	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/05/22 10:16	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/05/22 10:16	1

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QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-63719/10

Matrix: Water

Analysis Batch: 63719

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			08/05/22 10:16	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/05/22 10:16	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/05/22 10:16	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/05/22 10:16	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/05/22 10:16	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/05/22 10:16	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/05/22 10:16	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/05/22 10:16	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/05/22 10:16	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/05/22 10:16	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/05/22 10:16	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/05/22 10:16	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/05/22 10:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		74 - 124		08/05/22 10:16	1
Dibromofluoromethane (Surr)	106		75 - 131		08/05/22 10:16	1
1,2-Dichloroethane-d4 (Surr)	110		63 - 144		08/05/22 10:16	1
Toluene-d8 (Surr)	103		80 - 117		08/05/22 10:16	1

Lab Sample ID: LCS 860-63719/3

Matrix: Water

Analysis Batch: 63719

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	0.05097		mg/L		102	66 - 142
Bromobenzene	0.0500	0.05010		mg/L		100	75 - 125
Bromochloromethane	0.0500	0.05499		mg/L		110	60 - 140
Bromodichloromethane	0.0500	0.05037		mg/L		101	75 - 125
Bromoform	0.0500	0.04364		mg/L		87	75 - 125
Bromomethane	0.0500	0.06124		mg/L		122	60 - 140
2-Butanone	0.250	0.2739		mg/L		110	60 - 140
Carbon tetrachloride	0.0500	0.05104		mg/L		102	62 - 125
Chlorobenzene	0.0500	0.04987		mg/L		100	60 - 133
Chloroethane	0.0500	0.05815		mg/L		116	60 - 140
Chloroform	0.0500	0.05699		mg/L		114	70 - 130
Chloromethane	0.0500	0.05658		mg/L		113	60 - 140
2-Chlorotoluene	0.0500	0.05188		mg/L		104	73 - 125
4-Chlorotoluene	0.0500	0.05339		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05596		mg/L		112	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05110		mg/L		102	74 - 125
Dibromochloromethane	0.0500	0.04693		mg/L		94	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04611		mg/L		92	59 - 125
1,2-Dibromoethane	0.0500	0.05152		mg/L		103	73 - 125
1,2-Dichlorobenzene	0.0500	0.05074		mg/L		101	75 - 125
1,3-Dichlorobenzene	0.0500	0.05096		mg/L		102	75 - 125
1,4-Dichlorobenzene	0.0500	0.05075		mg/L		102	75 - 125
Dichlorodifluoromethane	0.0500	0.06086		mg/L		122	70 - 130

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QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-63719/3

Matrix: Water

Analysis Batch: 63719

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	0.05780		mg/L		116	72 - 125
1,2-Dichloroethane	0.0500	0.05303		mg/L		106	68 - 127
1,1-Dichloroethene	0.0500	0.05490		mg/L		110	59 - 172
1,2-Dichloropropane	0.0500	0.05335		mg/L		107	74 - 125
1,3-Dichloropropane	0.0500	0.05182		mg/L		104	75 - 125
2,2-Dichloropropane	0.0500	0.05409		mg/L		108	75 - 125
1,1-Dichloropropene	0.0500	0.05560		mg/L		111	75 - 125
Ethylbenzene	0.0500	0.05095		mg/L		102	75 - 125
Hexachlorobutadiene	0.0500	0.05090		mg/L		102	75 - 125
Isopropylbenzene	0.0500	0.05132		mg/L		103	75 - 125
Methylene Chloride	0.0500	0.05020		mg/L		100	75 - 125
m,p-Xylenes	0.0500	0.05029		mg/L		101	75 - 125
MTBE	0.0500	0.05712		mg/L		114	65 - 135
Naphthalene	0.0500	0.04447		mg/L		89	70 - 130
n-Butylbenzene	0.0500	0.05622		mg/L		112	75 - 125
N-Propylbenzene	0.0500	0.05342		mg/L		107	75 - 125
o-Xylene	0.0500	0.05011		mg/L		100	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05357		mg/L		107	75 - 125
sec-Butylbenzene	0.0500	0.05399		mg/L		108	75 - 125
Styrene	0.0500	0.05001		mg/L		100	75 - 125
tert-Butylbenzene	0.0500	0.05191		mg/L		104	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04872		mg/L		97	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05347		mg/L		107	74 - 125
Tetrachloroethene	0.0500	0.04892		mg/L		98	71 - 125
Toluene	0.0500	0.04960		mg/L		99	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05224		mg/L		104	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05197		mg/L		104	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04172		mg/L		83	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04887		mg/L		98	75 - 135
1,1,1-Trichloroethane	0.0500	0.05446		mg/L		109	75 - 125
1,1,2-Trichloroethane	0.0500	0.05218		mg/L		104	75 - 127
Trichloroethene	0.0500	0.04996		mg/L		100	62 - 137
Trichlorofluoromethane	0.0500	0.06546		mg/L		131	60 - 140
1,2,3-Trichloropropane	0.0500	0.04934		mg/L		99	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05163		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05276		mg/L		106	60 - 140
Vinyl chloride	0.0500	0.06005		mg/L		120	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	107		75 - 131
1,2-Dichloroethane-d4 (Surr)	105		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: 880-17778-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-63719/4

Matrix: Water

Analysis Batch: 63719

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	0.04941		mg/L		99	66 - 142	3	25
Bromobenzene	0.0500	0.04654		mg/L		93	75 - 125	7	25
Bromochloromethane	0.0500	0.05250		mg/L		105	60 - 140	5	25
Bromodichloromethane	0.0500	0.04829		mg/L		97	75 - 125	4	25
Bromoform	0.0500	0.04175		mg/L		83	75 - 125	4	25
Bromomethane	0.0500	0.05515		mg/L		110	60 - 140	10	25
2-Butanone	0.250	0.2654		mg/L		106	60 - 140	3	25
Carbon tetrachloride	0.0500	0.04807		mg/L		96	62 - 125	6	25
Chlorobenzene	0.0500	0.04826		mg/L		97	60 - 133	3	25
Chloroethane	0.0500	0.05000		mg/L		100	60 - 140	15	25
Chloroform	0.0500	0.05394		mg/L		108	70 - 130	5	25
Chloromethane	0.0500	0.04916		mg/L		98	60 - 140	14	25
2-Chlorotoluene	0.0500	0.04906		mg/L		98	73 - 125	6	25
4-Chlorotoluene	0.0500	0.04995		mg/L		100	74 - 125	7	25
cis-1,2-Dichloroethene	0.0500	0.05348		mg/L		107	75 - 125	5	25
cis-1,3-Dichloropropene	0.0500	0.04900		mg/L		98	74 - 125	4	25
Dibromochloromethane	0.0500	0.04514		mg/L		90	73 - 125	4	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04598		mg/L		92	59 - 125	0	25
1,2-Dibromoethane	0.0500	0.04913		mg/L		98	73 - 125	5	25
1,2-Dichlorobenzene	0.0500	0.04789		mg/L		96	75 - 125	6	25
1,3-Dichlorobenzene	0.0500	0.04765		mg/L		95	75 - 125	7	25
1,4-Dichlorobenzene	0.0500	0.04751		mg/L		95	75 - 125	7	25
Dichlorodifluoromethane	0.0500	0.04847		mg/L		97	70 - 130	23	25
1,1-Dichloroethane	0.0500	0.05497		mg/L		110	72 - 125	5	25
1,2-Dichloroethane	0.0500	0.05064		mg/L		101	68 - 127	5	25
1,1-Dichloroethene	0.0500	0.05275		mg/L		106	59 - 172	4	25
1,2-Dichloropropane	0.0500	0.05058		mg/L		101	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.04981		mg/L		100	75 - 125	4	25
2,2-Dichloropropane	0.0500	0.05197		mg/L		104	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.05320		mg/L		106	75 - 125	4	25
Ethylbenzene	0.0500	0.04846		mg/L		97	75 - 125	5	25
Hexachlorobutadiene	0.0500	0.04863		mg/L		97	75 - 125	5	25
Isopropylbenzene	0.0500	0.04914		mg/L		98	75 - 125	4	25
Methylene Chloride	0.0500	0.04869		mg/L		97	75 - 125	3	25
m,p-Xylenes	0.0500	0.04792		mg/L		96	75 - 125	5	25
MTBE	0.0500	0.05444		mg/L		109	65 - 135	5	25
Naphthalene	0.0500	0.04863		mg/L		97	70 - 130	9	25
n-Butylbenzene	0.0500	0.05299		mg/L		106	75 - 125	6	25
N-Propylbenzene	0.0500	0.05015		mg/L		100	75 - 125	6	25
o-Xylene	0.0500	0.04845		mg/L		97	75 - 125	3	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04994		mg/L		100	75 - 125	7	25
sec-Butylbenzene	0.0500	0.05026		mg/L		101	75 - 125	7	25
Styrene	0.0500	0.04756		mg/L		95	75 - 125	5	25
tert-Butylbenzene	0.0500	0.04848		mg/L		97	75 - 125	7	25
1,1,1,2-Tetrachloroethane	0.0500	0.04689		mg/L		94	72 - 125	4	25
1,1,2,2-Tetrachloroethane	0.0500	0.05068		mg/L		101	74 - 125	5	25
Tetrachloroethene	0.0500	0.04648		mg/L		93	71 - 125	5	25
Toluene	0.0500	0.04778		mg/L		96	59 - 139	4	25

Eurofins Midland

QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-63719/4

Matrix: Water

Analysis Batch: 63719

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	0.04999		mg/L		100	75 - 125	4	25
trans-1,3-Dichloropropene	0.0500	0.04994		mg/L		100	66 - 125	4	25
1,2,3-Trichlorobenzene	0.0500	0.04548		mg/L		91	75 - 137	9	25
1,2,4-Trichlorobenzene	0.0500	0.04928		mg/L		99	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.05238		mg/L		105	75 - 125	4	25
1,1,2-Trichloroethane	0.0500	0.05099		mg/L		102	75 - 127	2	25
Trichloroethene	0.0500	0.04796		mg/L		96	62 - 137	4	25
Trichlorofluoromethane	0.0500	0.05565		mg/L		111	60 - 140	16	25
1,2,3-Trichloropropane	0.0500	0.04931		mg/L		99	75 - 125	0	25
1,2,4-Trimethylbenzene	0.0500	0.04846		mg/L		97	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.04912		mg/L		98	60 - 140	7	25
Vinyl chloride	0.0500	0.05245		mg/L		105	60 - 140	13	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	107		75 - 131
1,2-Dichloroethane-d4 (Surr)	105		63 - 144
Toluene-d8 (Surr)	100		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-63765/3

Matrix: Water

Analysis Batch: 63765

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			08/05/22 10:46	1
Chloride	<0.200	U	0.500	0.200 mg/L			08/05/22 10:46	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/05/22 10:46	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/05/22 10:46	1

Lab Sample ID: MB 860-63765/48

Matrix: Water

Analysis Batch: 63765

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			08/05/22 21:27	1
Chloride	<0.200	U	0.500	0.200 mg/L			08/05/22 21:27	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/05/22 21:27	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/05/22 21:27	1

Lab Sample ID: MB 860-63765/78

Matrix: Water

Analysis Batch: 63765

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			08/06/22 03:22	1
Chloride	<0.200	U	0.500	0.200 mg/L			08/06/22 03:22	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/06/22 03:22	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-63765/78

Matrix: Water

Analysis Batch: 63765

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<0.109	U	0.500	0.109 mg/L			08/06/22 03:22	1

Lab Sample ID: LCS 860-63765/49

Matrix: Water

Analysis Batch: 63765

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	9.846		mg/L		98	90 - 110
Chloride	10.0	9.924		mg/L		99	90 - 110
Fluoride	10.0	10.47		mg/L		105	90 - 110
Sulfate	10.0	9.912		mg/L		99	90 - 110

Lab Sample ID: LCS 860-63765/6

Matrix: Water

Analysis Batch: 63765

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	10.06		mg/L		101	90 - 110
Chloride	10.0	10.10		mg/L		101	90 - 110
Fluoride	10.0	10.50		mg/L		105	90 - 110
Sulfate	10.0	10.08		mg/L		101	90 - 110

Lab Sample ID: LCS 860-63765/79

Matrix: Water

Analysis Batch: 63765

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	9.681		mg/L		97	90 - 110
Chloride	10.0	9.759		mg/L		98	90 - 110
Fluoride	10.0	10.28		mg/L		103	90 - 110
Sulfate	10.0	9.745		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-63765/50

Matrix: Water

Analysis Batch: 63765

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	9.834		mg/L		98	90 - 110	0	20
Chloride	10.0	9.892		mg/L		99	90 - 110	0	20
Fluoride	10.0	10.47		mg/L		105	90 - 110	0	20
Sulfate	10.0	9.913		mg/L		99	90 - 110	0	20

Lab Sample ID: LCSD 860-63765/7

Matrix: Water

Analysis Batch: 63765

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	10.07		mg/L		101	90 - 110	0	20
Chloride	10.0	10.05		mg/L		101	90 - 110	0	20
Fluoride	10.0	10.49		mg/L		105	90 - 110	0	20

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QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-63765/7

Matrix: Water

Analysis Batch: 63765

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	10.09		mg/L		101	90 - 110	0	20

Lab Sample ID: LCSD 860-63765/80

Matrix: Water

Analysis Batch: 63765

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	9.672		mg/L		97	90 - 110	0	20
Chloride	10.0	9.699		mg/L		97	90 - 110	1	20
Fluoride	10.0	10.28		mg/L		103	90 - 110	0	20
Sulfate	10.0	9.724		mg/L		97	90 - 110	0	20

Lab Sample ID: LLCS 860-63765/5

Matrix: Water

Analysis Batch: 63765

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	0.6184		mg/L		124	50 - 150		
Chloride	0.500	0.5646		mg/L		113	50 - 150		
Fluoride	0.500	0.5062		mg/L		101	50 - 150		
Sulfate	0.500	0.5402		mg/L		108	50 - 150		

Lab Sample ID: MB 860-63766/3

Matrix: Water

Analysis Batch: 63766

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			08/05/22 10:46	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/05/22 10:46	1

Lab Sample ID: MB 860-63766/48

Matrix: Water

Analysis Batch: 63766

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			08/05/22 21:27	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/05/22 21:27	1

Lab Sample ID: MB 860-63766/78

Matrix: Water

Analysis Batch: 63766

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			08/06/22 03:22	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/06/22 03:22	1

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QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-63766/49

Matrix: Water

Analysis Batch: 63766

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	9.932		mg/L		99	80 - 120
Nitrite as N	5.00	5.025		mg/L		100	80 - 120

Lab Sample ID: LCS 860-63766/6

Matrix: Water

Analysis Batch: 63766

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	10.08		mg/L		101	80 - 120
Nitrite as N	5.00	5.110		mg/L		102	80 - 120

Lab Sample ID: LCS 860-63766/79

Matrix: Water

Analysis Batch: 63766

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	9.766		mg/L		98	80 - 120
Nitrite as N	5.00	4.942		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-63766/50

Matrix: Water

Analysis Batch: 63766

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	9.932		mg/L		99	80 - 120	2	20
Nitrite as N	5.00	5.071		mg/L		101	80 - 120	3	20

Lab Sample ID: LCSD 860-63766/7

Matrix: Water

Analysis Batch: 63766

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	10.08		mg/L		101	80 - 120	2	20
Nitrite as N	5.00	5.148		mg/L		103	80 - 120	2	20

Lab Sample ID: LCSD 860-63766/80

Matrix: Water

Analysis Batch: 63766

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	9.734		mg/L		97	80 - 120	0	20
Nitrite as N	5.00	4.980		mg/L		100	80 - 120	1	20

Lab Sample ID: LLCS 860-63766/4

Matrix: Water

Analysis Batch: 63766

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	0.09632	J	mg/L		96	50 - 150
Nitrite as N	0.100	0.09264	J	mg/L		93	50 - 150

Eurofins Midland

QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-63886/1-A

Matrix: Water

Analysis Batch: 64191

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 63886

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		08/06/22 11:15	08/08/22 19:12	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		08/06/22 11:15	08/08/22 19:12	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		08/06/22 11:15	08/08/22 19:12	1
Sodium	<0.152	U	0.500	0.152 mg/L		08/06/22 11:15	08/08/22 19:12	1
SiO2	<0.471	U	1.07	0.471 mg/L		08/06/22 11:15	08/08/22 19:12	1

Lab Sample ID: LCS 860-63886/2-A

Matrix: Water

Analysis Batch: 64191

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 63886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	24.13		mg/L		97	85 - 115
Magnesium	25.0	23.91		mg/L		96	85 - 115
Potassium	10.0	9.630		mg/L		96	85 - 115
Sodium	25.0	23.88		mg/L		96	85 - 115
SiO2	21.4	20.68		mg/L		97	85 - 115

Lab Sample ID: LCSD 860-63886/3-A

Matrix: Water

Analysis Batch: 64191

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 63886

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	24.10		mg/L		96	85 - 115	0	20
Magnesium	25.0	23.93		mg/L		96	85 - 115	0	20
Potassium	10.0	9.644		mg/L		96	85 - 115	0	20
Sodium	25.0	23.88		mg/L		96	85 - 115	0	20
SiO2	21.4	20.75		mg/L		97	85 - 115	0	20

Lab Sample ID: LLCS 860-63886/4-A

Matrix: Water

Analysis Batch: 64191

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 63886

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	0.200	0.1910	J	mg/L		96	50 - 150
Potassium	0.500	0.5845		mg/L		117	50 - 150
Sodium	0.500	0.4569	J	mg/L		91	50 - 150
SiO2	1.07	1.006	J	mg/L		94	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-63952/5

Matrix: Water

Analysis Batch: 63952

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			08/06/22 11:28	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/06/22 11:28	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/06/22 11:28	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/06/22 11:28	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			08/06/22 11:28	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-17778-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 860-63952/6

Matrix: Water

Analysis Batch: 63952

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	251.1		mg/L		100	85 - 115

Lab Sample ID: LCSD 860-63952/7

Matrix: Water

Analysis Batch: 63952

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	251.1		mg/L		100	85 - 115	0	20

Lab Sample ID: 880-17778-1 DU

Matrix: Water

Analysis Batch: 63952

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	600		585.8		mg/L		2	20
Bicarbonate Alkalinity as CaCO3	600		585.8		mg/L		2	20
Carbonate Alkalinity as CaCO3	<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 860-63858/1

Matrix: Water

Analysis Batch: 63858

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<1.00	U	1.00	1.00	mg/L		08/05/22 16:28	1

Lab Sample ID: LCS 860-63858/2

Matrix: Water

Analysis Batch: 63858

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

Lab Sample ID: LCSD 860-63858/3

Matrix: Water

Analysis Batch: 63858

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	970.0		mg/L		97	80 - 120	2	10

Eurofins Midland

QC Association Summary

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

Job ID: 880-17778-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 63719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total/NA	Water	8260C	
MB 860-63719/10	Method Blank	Total/NA	Water	8260C	
LCS 860-63719/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-63719/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 63765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total/NA	Water	300.0	
MB 860-63765/3	Method Blank	Total/NA	Water	300.0	
MB 860-63765/48	Method Blank	Total/NA	Water	300.0	
MB 860-63765/78	Method Blank	Total/NA	Water	300.0	
LCS 860-63765/49	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63765/6	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63765/79	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-63765/50	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63765/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63765/80	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-63765/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 63766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total/NA	Water	300.0	
MB 860-63766/3	Method Blank	Total/NA	Water	300.0	
MB 860-63766/48	Method Blank	Total/NA	Water	300.0	
MB 860-63766/78	Method Blank	Total/NA	Water	300.0	
LCS 860-63766/49	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63766/6	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63766/79	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-63766/50	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63766/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63766/80	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-63766/4	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 63886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-63886/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-63886/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-63886/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-63886/4-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 64191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	63886
MB 860-63886/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	63886
LCS 860-63886/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	63886
LCSD 860-63886/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	63886
LLCS 860-63886/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	63886

Eurofins Midland

QC Association Summary

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

Job ID: 880-17778-1
SDG: Hobbs NM

Metals

Analysis Batch: 64998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	63886

General Chemistry

Analysis Batch: 63858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-63858/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-63858/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-63858/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 63889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 63952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-63952/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-63952/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-63952/7	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
880-17778-1 DU	Levey Well	Total/NA	Water	SM 2320B	

Analysis Batch: 64802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17778-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-17778-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-17778-1
Date Collected: 08/04/22 10:40 Matrix: Water
Date Received: 08/04/22 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	63719	NA	EET HOU	08/05/22 16:05
Total/NA	Analysis	300.0		1	63765	ANP	EET HOU	08/05/22 14:09
Total/NA	Analysis	300.0		1	63766	ANP	EET HOU	08/05/22 14:09
Total Recoverable	Prep	200.7			63886	AGR	EET HOU	08/06/22 11:16
Total Recoverable	Analysis	200.7 Rev 4.4		1	64191	DP	EET HOU	08/08/22 19:48
Total Recoverable	Prep	200.7			63886	AGR	EET HOU	08/06/22 11:16
Total Recoverable	Analysis	200.7 Rev 4.4		10	64998	DP	EET HOU	08/12/22 23:14
Total/NA	Analysis	SM 1030E		1	64802	AA	EET HOU	08/12/22 16:38
Total/NA	Analysis	SM 2320B		1	63952	TL	EET HOU	08/06/22 14:07
Total/NA	Analysis	SM 2540C		1	63858	MCA	EET HOU	08/05/22 16:28
Total/NA	Analysis	SM 4500 H+ B		1	63889	TL	EET HOU	08/06/22 11:15

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: 880-17778-1
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: 880-17778-1
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: 880-17778-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17778-1	Levey Well	Water	08/04/22 10:40	08/04/22 16:49

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- 14



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0380 San Antonio, TX (210) 509-3333
Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 784-1296
Hobbs NM (575-392-1550) Phoenix AZ (480-355-0800) Atlanta GA (770-449-8800) Tampa FL (813-281-1111)

Work Order No:

17778

Page 1 of 1

Project Manager:	Beaux Jennings		Bill to, (if different)	
Company Name:	Ensolum LLC		Company Name:	
Address:	601 Marensfeld #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: ☐

[illegible]

SAMPLE RECEIPT			
Temp Blank:	Yes	No	Wet Ice: Yes No
Temperature (°C):	1.3115 Thermometer ID		
Received In-lab:	Yes	No	7-188
Cooler Custody Seals:	Yes	No	N/A
Correction Factor:	N/A		
Sample Custody Seals:	Yes	No	N/A
Total Containers:	26		

Number of Containers

F, Cl, SO₄, B

Ca, K, Mg, Na, Si

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	VOCs	Anions:	Cations:	pH	Alkalinity	TDS	Sample Comments	
Levey Well	GW	8/4/22	1040		7	X	X	X	X	X	X		24 Hr
880-17778 Chain of Custody  Sample ID: 880-17778													

880-17778 Chain of Custody



Total 200.7 / 6010 200.8 / 6020;
Circle Method(s) and Metal(s) to be

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 Zr
 TCLP/ SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti 11 4623 / 2454 / 2470 / 2747

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
		8/4/22			
		10:49			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-17778-1

SDG Number: Hobbs NM

Login Number: 17778

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: 880-17778-1

SDG Number: Hobbs NM

Login Number: 17778

List Number: 2

Creator: Bolch, Taylor

List Source: Eurofins Houston

List Creation: 08/05/22 11:54 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: 880-17779-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

Authorized for release by:

8/16/2022 8:17:13 AM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

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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: South Hobbs - 03B1417002

Laboratory Job ID: 880-17779-1

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Definitions/Glossary

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

Job ID: 880-17779-1

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
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.
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.

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

Case Narrative

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

Job ID: 880-17779-1

Job ID: 880-17779-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-17779-1

Receipt

The samples were received on 8/4/2022 4:49 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 1.5°C

GC/MS VOA

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-63719 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_ORGFMS: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 860-63766 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Nitrate in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

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: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-17779-1

Date Collected: 08/04/22 11:50

Matrix: Water

Date Received: 08/04/22 16:49

Method: 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			08/05/22 15:03	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/05/22 15:03	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/05/22 15:03	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/05/22 15:03	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/05/22 15:03	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/05/22 15:03	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/05/22 15:03	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/05/22 15:03	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/05/22 15:03	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/05/22 15:03	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/05/22 15:03	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/05/22 15:03	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/05/22 15:03	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/05/22 15:03	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/05/22 15:03	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/05/22 15:03	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/05/22 15:03	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/05/22 15:03	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/05/22 15:03	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/05/22 15:03	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 15:03	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 15:03	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 15:03	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/05/22 15:03	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/05/22 15:03	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/05/22 15:03	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/05/22 15:03	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/05/22 15:03	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/05/22 15:03	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/05/22 15:03	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/05/22 15:03	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/05/22 15:03	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/05/22 15:03	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/05/22 15:03	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/05/22 15:03	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/05/22 15:03	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/05/22 15:03	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 15:03	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/05/22 15:03	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/05/22 15:03	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 15:03	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/05/22 15:03	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/05/22 15:03	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/05/22 15:03	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 15:03	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/05/22 15:03	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/05/22 15:03	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/05/22 15:03	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			08/05/22 15:03	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-17779-1

Date Collected: 08/04/22 11:50

Matrix: Water

Date Received: 08/04/22 16:49

Method: 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			08/05/22 15:03	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/05/22 15:03	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/05/22 15:03	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/05/22 15:03	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/05/22 15:03	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/05/22 15:03	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/05/22 15:03	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/05/22 15:03	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/05/22 15:03	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/05/22 15:03	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/05/22 15:03	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/05/22 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		74 - 124		08/05/22 15:03	1
Dibromofluoromethane (Surr)	108		75 - 131		08/05/22 15:03	1
1,2-Dichloroethane-d4 (Surr)	112		63 - 144		08/05/22 15:03	1
Toluene-d8 (Surr)	104		80 - 117		08/05/22 15:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.906	U	4.59	0.906 mg/L			08/08/22 18:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.906	U	4.59	0.906 mg/L		08/05/22 15:46	08/05/22 18:45	1
Diesel Range Organics (Over C10-C28)	<0.906	U	4.59	0.906 mg/L		08/05/22 15:46	08/05/22 18:45	1
Oil Range Organics (Over C28-C36)	<0.875	U	4.59	0.875 mg/L		08/05/22 15:46	08/05/22 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 135	08/05/22 15:46	08/05/22 18:45	1
o-Terphenyl	91		70 - 135	08/05/22 15:46	08/05/22 18:45	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.5		0.500	0.200 mg/L			08/05/22 14:57	1
Nitrate as N	0.126		0.100	0.0391 mg/L			08/05/22 14:57	1
Fluoride	0.633		0.500	0.100 mg/L			08/05/22 14:57	1
Nitrite as N	0.118		0.100	0.0293 mg/L			08/05/22 14:57	1
Sulfate	43.1		0.500	0.109 mg/L			08/05/22 14:57	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	253		4.00	4.00 mg/L			08/06/22 14:27	1
Bicarbonate Alkalinity as CaCO3	253		4.00	4.00 mg/L			08/06/22 14:27	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/06/22 14:27	1
Carbon dioxide	255			mg/L			08/09/22 10:42	1
Carbon Dioxide, Free	31.9			mg/L			08/09/22 10:42	1
pH	7.2	HF		SU			08/06/22 11:17	1

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Client Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-17779-1

Date Collected: 08/04/22 11:50

Matrix: Water

Date Received: 08/04/22 16:49

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature	19.2	HF		Degrees C			08/06/22 11:17	1
Sulfide	0.800	J	5.00	0.495 mg/L			08/08/22 14:45	1

Client Sample ID: MW-2

Lab Sample ID: 880-17779-2

Date Collected: 08/04/22 13:10

Matrix: Water

Date Received: 08/04/22 16:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0245		0.00100	0.000533 mg/L			08/05/22 15:24	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/05/22 15:24	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/05/22 15:24	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/05/22 15:24	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/05/22 15:24	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/05/22 15:24	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/05/22 15:24	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/05/22 15:24	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/05/22 15:24	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/05/22 15:24	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/05/22 15:24	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/05/22 15:24	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/05/22 15:24	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/05/22 15:24	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/05/22 15:24	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/05/22 15:24	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/05/22 15:24	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/05/22 15:24	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/05/22 15:24	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/05/22 15:24	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 15:24	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 15:24	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 15:24	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/05/22 15:24	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/05/22 15:24	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/05/22 15:24	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/05/22 15:24	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/05/22 15:24	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/05/22 15:24	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/05/22 15:24	1
Ethylbenzene	0.0242		0.00100	0.000411 mg/L			08/05/22 15:24	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/05/22 15:24	1
Isopropylbenzene	0.00956		0.00100	0.000613 mg/L			08/05/22 15:24	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/05/22 15:24	1
m,p-Xylenes	0.108		0.0100	0.00124 mg/L			08/05/22 15:24	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/05/22 15:24	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/05/22 15:24	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 15:24	1
N-Propylbenzene	0.00311		0.00100	0.000498 mg/L			08/05/22 15:24	1
o-Xylene	0.00972		0.00100	0.000551 mg/L			08/05/22 15:24	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 15:24	1

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Client Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-17779-2

Date Collected: 08/04/22 13:10

Matrix: Water

Date Received: 08/04/22 16:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.00102		0.00100	0.000468 mg/L			08/05/22 15:24	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/05/22 15:24	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/05/22 15:24	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 15:24	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/05/22 15:24	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/05/22 15:24	1
Toluene	0.00255		0.00100	0.000475 mg/L			08/05/22 15:24	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			08/05/22 15:24	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/05/22 15:24	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/05/22 15:24	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/05/22 15:24	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/05/22 15:24	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/05/22 15:24	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/05/22 15:24	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/05/22 15:24	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/05/22 15:24	1
1,2,4-Trimethylbenzene	0.0307		0.00100	0.000417 mg/L			08/05/22 15:24	1
1,3,5-Trimethylbenzene	0.00826		0.00100	0.000456 mg/L			08/05/22 15:24	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/05/22 15:24	1
Xylenes, Total	0.118		0.0100	0.00124 mg/L			08/05/22 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		74 - 124		08/05/22 15:24	1
Dibromofluoromethane (Surr)	106		75 - 131		08/05/22 15:24	1
1,2-Dichloroethane-d4 (Surr)	113		63 - 144		08/05/22 15:24	1
Toluene-d8 (Surr)	102		80 - 117		08/05/22 15:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.31	J	4.57	0.904 mg/L			08/08/22 18:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.31	J	4.57	0.904 mg/L		08/05/22 15:47	08/05/22 19:04	1
Diesel Range Organics (Over C10-C28)	<0.904	U	4.57	0.904 mg/L		08/05/22 15:47	08/05/22 19:04	1
Oil Range Organics (Over C28-C36)	<0.872	U	4.57	0.872 mg/L		08/05/22 15:47	08/05/22 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 135	08/05/22 15:47	08/05/22 19:04	1
o-Terphenyl	76		70 - 135	08/05/22 15:47	08/05/22 19:04	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		0.500	0.200 mg/L			08/05/22 15:09	1
Nitrate as N	0.451		0.100	0.0391 mg/L			08/05/22 15:09	1
Fluoride	0.112	J	0.500	0.100 mg/L			08/05/22 15:09	1
Nitrite as N	0.477		0.100	0.0293 mg/L			08/05/22 15:09	1
Sulfate	99.9		0.500	0.109 mg/L			08/05/22 15:09	1

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Client Sample Results

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

Job ID: 880-17779-1

Client Sample ID: MW-2
Date Collected: 08/04/22 13:10
Date Received: 08/04/22 16:49

Lab Sample ID: 880-17779-2
Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1250		4.00	4.00	mg/L			08/06/22 14:42	1
Bicarbonate Alkalinity as CaCO3	1250		4.00	4.00	mg/L			08/06/22 14:42	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			08/06/22 14:42	1
Carbon dioxide	2670				mg/L			08/09/22 10:42	1
Carbon Dioxide, Free	1570				mg/L			08/09/22 10:42	1
pH	6.2	HF			SU			08/06/22 11:18	1
Temperature	19.2	HF			Degrees C			08/06/22 11:18	1
Sulfide	<0.495	U	5.00	0.495	mg/L			08/08/22 14:45	1

Surrogate Summary

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

Job ID: 880-17779-1

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)
860-30815-C-12 MS	Matrix Spike	104	106	105	100
880-17779-1	MW-1	107	108	112	104
880-17779-2	MW-2	104	106	113	102
LCS 860-63719/3	Lab Control Sample	103	107	105	100
LCSD 860-63719/4	Lab Control Sample Dup	101	107	105	100
MB 860-63719/10	Method Blank	103	106	110	103
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)
880-17779-1	MW-1	87	91
880-17779-2	MW-2	70	76
LCS 860-63846/2-A	Lab Control Sample	103	88
LCSD 860-63846/3-A	Lab Control Sample Dup	100	85
MB 860-63846/1-A	Method Blank	83	88
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-63719/10

Matrix: Water

Analysis Batch: 63719

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			08/05/22 10:16	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/05/22 10:16	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/05/22 10:16	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/05/22 10:16	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/05/22 10:16	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/05/22 10:16	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/05/22 10:16	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/05/22 10:16	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/05/22 10:16	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/05/22 10:16	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/05/22 10:16	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/05/22 10:16	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/05/22 10:16	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/05/22 10:16	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/05/22 10:16	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/05/22 10:16	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/05/22 10:16	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/05/22 10:16	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/05/22 10:16	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/05/22 10:16	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 10:16	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/05/22 10:16	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 10:16	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/05/22 10:16	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/05/22 10:16	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/05/22 10:16	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/05/22 10:16	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/05/22 10:16	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/05/22 10:16	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/05/22 10:16	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/05/22 10:16	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/05/22 10:16	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/05/22 10:16	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/05/22 10:16	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/05/22 10:16	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/05/22 10:16	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/05/22 10:16	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 10:16	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/05/22 10:16	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/05/22 10:16	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/05/22 10:16	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/05/22 10:16	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/05/22 10:16	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/05/22 10:16	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/05/22 10:16	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/05/22 10:16	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/05/22 10:16	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/05/22 10:16	1

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-63719/10

Matrix: Water

Analysis Batch: 63719

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			08/05/22 10:16	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/05/22 10:16	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/05/22 10:16	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/05/22 10:16	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/05/22 10:16	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/05/22 10:16	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/05/22 10:16	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/05/22 10:16	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/05/22 10:16	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/05/22 10:16	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/05/22 10:16	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/05/22 10:16	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/05/22 10:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		74 - 124		08/05/22 10:16	1
Dibromofluoromethane (Surr)	106		75 - 131		08/05/22 10:16	1
1,2-Dichloroethane-d4 (Surr)	110		63 - 144		08/05/22 10:16	1
Toluene-d8 (Surr)	103		80 - 117		08/05/22 10:16	1

Lab Sample ID: LCS 860-63719/3

Matrix: Water

Analysis Batch: 63719

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	0.05097		mg/L		102	66 - 142
Bromobenzene	0.0500	0.05010		mg/L		100	75 - 125
Bromochloromethane	0.0500	0.05499		mg/L		110	60 - 140
Bromodichloromethane	0.0500	0.05037		mg/L		101	75 - 125
Bromoform	0.0500	0.04364		mg/L		87	75 - 125
Bromomethane	0.0500	0.06124		mg/L		122	60 - 140
2-Butanone	0.250	0.2739		mg/L		110	60 - 140
Carbon tetrachloride	0.0500	0.05104		mg/L		102	62 - 125
Chlorobenzene	0.0500	0.04987		mg/L		100	60 - 133
Chloroethane	0.0500	0.05815		mg/L		116	60 - 140
Chloroform	0.0500	0.05699		mg/L		114	70 - 130
Chloromethane	0.0500	0.05658		mg/L		113	60 - 140
2-Chlorotoluene	0.0500	0.05188		mg/L		104	73 - 125
4-Chlorotoluene	0.0500	0.05339		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05596		mg/L		112	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05110		mg/L		102	74 - 125
Dibromochloromethane	0.0500	0.04693		mg/L		94	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04611		mg/L		92	59 - 125
1,2-Dibromoethane	0.0500	0.05152		mg/L		103	73 - 125
1,2-Dichlorobenzene	0.0500	0.05074		mg/L		101	75 - 125
1,3-Dichlorobenzene	0.0500	0.05096		mg/L		102	75 - 125
1,4-Dichlorobenzene	0.0500	0.05075		mg/L		102	75 - 125
Dichlorodifluoromethane	0.0500	0.06086		mg/L		122	70 - 130

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QC Sample Results

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

Job ID: 880-17779-1

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

Lab Sample ID: LCS 860-63719/3				Client Sample ID: Lab Control Sample			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 63719							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.05780		mg/L		116	72 - 125
1,2-Dichloroethane	0.0500	0.05303		mg/L		106	68 - 127
1,1-Dichloroethene	0.0500	0.05490		mg/L		110	59 - 172
1,2-Dichloropropane	0.0500	0.05335		mg/L		107	74 - 125
1,3-Dichloropropane	0.0500	0.05182		mg/L		104	75 - 125
2,2-Dichloropropane	0.0500	0.05409		mg/L		108	75 - 125
1,1-Dichloropropene	0.0500	0.05560		mg/L		111	75 - 125
Ethylbenzene	0.0500	0.05095		mg/L		102	75 - 125
Hexachlorobutadiene	0.0500	0.05090		mg/L		102	75 - 125
Isopropylbenzene	0.0500	0.05132		mg/L		103	75 - 125
Methylene Chloride	0.0500	0.05020		mg/L		100	75 - 125
m,p-Xylenes	0.0500	0.05029		mg/L		101	75 - 125
MTBE	0.0500	0.05712		mg/L		114	65 - 135
Naphthalene	0.0500	0.04447		mg/L		89	70 - 130
n-Butylbenzene	0.0500	0.05622		mg/L		112	75 - 125
N-Propylbenzene	0.0500	0.05342		mg/L		107	75 - 125
o-Xylene	0.0500	0.05011		mg/L		100	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05357		mg/L		107	75 - 125
sec-Butylbenzene	0.0500	0.05399		mg/L		108	75 - 125
Styrene	0.0500	0.05001		mg/L		100	75 - 125
tert-Butylbenzene	0.0500	0.05191		mg/L		104	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04872		mg/L		97	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05347		mg/L		107	74 - 125
Tetrachloroethene	0.0500	0.04892		mg/L		98	71 - 125
Toluene	0.0500	0.04960		mg/L		99	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05224		mg/L		104	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05197		mg/L		104	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04172		mg/L		83	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04887		mg/L		98	75 - 135
1,1,1-Trichloroethane	0.0500	0.05446		mg/L		109	75 - 125
1,1,2-Trichloroethane	0.0500	0.05218		mg/L		104	75 - 127
Trichloroethene	0.0500	0.04996		mg/L		100	62 - 137
Trichlorofluoromethane	0.0500	0.06546		mg/L		131	60 - 140
1,2,3-Trichloropropane	0.0500	0.04934		mg/L		99	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05163		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05276		mg/L		106	60 - 140
Vinyl chloride	0.0500	0.06005		mg/L		120	60 - 140
		LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	103		74 - 124				
Dibromofluoromethane (Surr)	107		75 - 131				
1,2-Dichloroethane-d4 (Surr)	105		63 - 144				
Toluene-d8 (Surr)	100		80 - 117				

QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-63719/4

Matrix: Water

Analysis Batch: 63719

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	0.04941		mg/L		99	66 - 142	3	25
Bromobenzene	0.0500	0.04654		mg/L		93	75 - 125	7	25
Bromochloromethane	0.0500	0.05250		mg/L		105	60 - 140	5	25
Bromodichloromethane	0.0500	0.04829		mg/L		97	75 - 125	4	25
Bromoform	0.0500	0.04175		mg/L		83	75 - 125	4	25
Bromomethane	0.0500	0.05515		mg/L		110	60 - 140	10	25
2-Butanone	0.250	0.2654		mg/L		106	60 - 140	3	25
Carbon tetrachloride	0.0500	0.04807		mg/L		96	62 - 125	6	25
Chlorobenzene	0.0500	0.04826		mg/L		97	60 - 133	3	25
Chloroethane	0.0500	0.05000		mg/L		100	60 - 140	15	25
Chloroform	0.0500	0.05394		mg/L		108	70 - 130	5	25
Chloromethane	0.0500	0.04916		mg/L		98	60 - 140	14	25
2-Chlorotoluene	0.0500	0.04906		mg/L		98	73 - 125	6	25
4-Chlorotoluene	0.0500	0.04995		mg/L		100	74 - 125	7	25
cis-1,2-Dichloroethene	0.0500	0.05348		mg/L		107	75 - 125	5	25
cis-1,3-Dichloropropene	0.0500	0.04900		mg/L		98	74 - 125	4	25
Dibromochloromethane	0.0500	0.04514		mg/L		90	73 - 125	4	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04598		mg/L		92	59 - 125	0	25
1,2-Dibromoethane	0.0500	0.04913		mg/L		98	73 - 125	5	25
1,2-Dichlorobenzene	0.0500	0.04789		mg/L		96	75 - 125	6	25
1,3-Dichlorobenzene	0.0500	0.04765		mg/L		95	75 - 125	7	25
1,4-Dichlorobenzene	0.0500	0.04751		mg/L		95	75 - 125	7	25
Dichlorodifluoromethane	0.0500	0.04847		mg/L		97	70 - 130	23	25
1,1-Dichloroethane	0.0500	0.05497		mg/L		110	72 - 125	5	25
1,2-Dichloroethane	0.0500	0.05064		mg/L		101	68 - 127	5	25
1,1-Dichloroethene	0.0500	0.05275		mg/L		106	59 - 172	4	25
1,2-Dichloropropane	0.0500	0.05058		mg/L		101	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.04981		mg/L		100	75 - 125	4	25
2,2-Dichloropropane	0.0500	0.05197		mg/L		104	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.05320		mg/L		106	75 - 125	4	25
Ethylbenzene	0.0500	0.04846		mg/L		97	75 - 125	5	25
Hexachlorobutadiene	0.0500	0.04863		mg/L		97	75 - 125	5	25
Isopropylbenzene	0.0500	0.04914		mg/L		98	75 - 125	4	25
Methylene Chloride	0.0500	0.04869		mg/L		97	75 - 125	3	25
m,p-Xylenes	0.0500	0.04792		mg/L		96	75 - 125	5	25
MTBE	0.0500	0.05444		mg/L		109	65 - 135	5	25
Naphthalene	0.0500	0.04863		mg/L		97	70 - 130	9	25
n-Butylbenzene	0.0500	0.05299		mg/L		106	75 - 125	6	25
N-Propylbenzene	0.0500	0.05015		mg/L		100	75 - 125	6	25
o-Xylene	0.0500	0.04845		mg/L		97	75 - 125	3	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04994		mg/L		100	75 - 125	7	25
sec-Butylbenzene	0.0500	0.05026		mg/L		101	75 - 125	7	25
Styrene	0.0500	0.04756		mg/L		95	75 - 125	5	25
tert-Butylbenzene	0.0500	0.04848		mg/L		97	75 - 125	7	25
1,1,1,2-Tetrachloroethane	0.0500	0.04689		mg/L		94	72 - 125	4	25
1,1,2,2-Tetrachloroethane	0.0500	0.05068		mg/L		101	74 - 125	5	25
Tetrachloroethene	0.0500	0.04648		mg/L		93	71 - 125	5	25
Toluene	0.0500	0.04778		mg/L		96	59 - 139	4	25

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QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-63719/4

Matrix: Water

Analysis Batch: 63719

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	0.04999		mg/L		100	75 - 125	4	25
trans-1,3-Dichloropropene	0.0500	0.04994		mg/L		100	66 - 125	4	25
1,2,3-Trichlorobenzene	0.0500	0.04548		mg/L		91	75 - 137	9	25
1,2,4-Trichlorobenzene	0.0500	0.04928		mg/L		99	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.05238		mg/L		105	75 - 125	4	25
1,1,2-Trichloroethane	0.0500	0.05099		mg/L		102	75 - 127	2	25
Trichloroethene	0.0500	0.04796		mg/L		96	62 - 137	4	25
Trichlorofluoromethane	0.0500	0.05565		mg/L		111	60 - 140	16	25
1,2,3-Trichloropropane	0.0500	0.04931		mg/L		99	75 - 125	0	25
1,2,4-Trimethylbenzene	0.0500	0.04846		mg/L		97	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.04912		mg/L		98	60 - 140	7	25
Vinyl chloride	0.0500	0.05245		mg/L		105	60 - 140	13	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	107		75 - 131
1,2-Dichloroethane-d4 (Surr)	105		63 - 144
Toluene-d8 (Surr)	100		80 - 117

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

Lab Sample ID: MB 860-63846/1-A

Matrix: Water

Analysis Batch: 63776

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63846

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		08/05/22 15:46	08/05/22 18:25	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		08/05/22 15:46	08/05/22 18:25	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		08/05/22 15:46	08/05/22 18:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 135	08/05/22 15:46	08/05/22 18:25	1
o-Terphenyl	88		70 - 135	08/05/22 15:46	08/05/22 18:25	1

Lab Sample ID: LCS 860-63846/2-A

Matrix: Water

Analysis Batch: 63776

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.9	115.0		mg/L		115	70 - 135
Diesel Range Organics (Over C10-C28)	100	100.9		mg/L		101	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	103		70 - 135
o-Terphenyl	88		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-63846/3-A

Matrix: Water

Analysis Batch: 63776

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 63846

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.9	116.1		mg/L		116	70 - 135	1	35
Diesel Range Organics (Over C10-C28)	100	102.3		mg/L		102	70 - 135	1	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 135						
o-Terphenyl	85		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-63765/3

Matrix: Water

Analysis Batch: 63765

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			08/05/22 10:46	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/05/22 10:46	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/05/22 10:46	1

Lab Sample ID: MB 860-63765/48

Matrix: Water

Analysis Batch: 63765

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			08/05/22 21:27	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/05/22 21:27	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/05/22 21:27	1

Lab Sample ID: MB 860-63765/78

Matrix: Water

Analysis Batch: 63765

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			08/06/22 03:22	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/06/22 03:22	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/06/22 03:22	1

Lab Sample ID: LCS 860-63765/49

Matrix: Water

Analysis Batch: 63765

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	9.924		mg/L		99	90 - 110
Fluoride	10.0	10.47		mg/L		105	90 - 110
Sulfate	10.0	9.912		mg/L		99	90 - 110

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QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-63765/6

Matrix: Water

Analysis Batch: 63765

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	10.10		mg/L		101	90 - 110		
Fluoride	10.0	10.50		mg/L		105	90 - 110		
Sulfate	10.0	10.08		mg/L		101	90 - 110		

Lab Sample ID: LCS 860-63765/79

Matrix: Water

Analysis Batch: 63765

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	9.759		mg/L		98	90 - 110		
Fluoride	10.0	10.28		mg/L		103	90 - 110		
Sulfate	10.0	9.745		mg/L		97	90 - 110		

Lab Sample ID: LCSD 860-63765/50

Matrix: Water

Analysis Batch: 63765

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	9.892		mg/L		99	90 - 110	0	20
Fluoride	10.0	10.47		mg/L		105	90 - 110	0	20
Sulfate	10.0	9.913		mg/L		99	90 - 110	0	20

Lab Sample ID: LCSD 860-63765/7

Matrix: Water

Analysis Batch: 63765

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	10.05		mg/L		101	90 - 110	0	20
Fluoride	10.0	10.49		mg/L		105	90 - 110	0	20
Sulfate	10.0	10.09		mg/L		101	90 - 110	0	20

Lab Sample ID: LCSD 860-63765/80

Matrix: Water

Analysis Batch: 63765

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	9.699		mg/L		97	90 - 110	1	20
Fluoride	10.0	10.28		mg/L		103	90 - 110	0	20
Sulfate	10.0	9.724		mg/L		97	90 - 110	0	20

Lab Sample ID: LLCS 860-63765/5

Matrix: Water

Analysis Batch: 63765

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	0.5646		mg/L		113	50 - 150		
Fluoride	0.500	0.5062		mg/L		101	50 - 150		
Sulfate	0.500	0.5402		mg/L		108	50 - 150		

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-63766/3

Matrix: Water

Analysis Batch: 63766

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			08/05/22 10:46	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/05/22 10:46	1

Lab Sample ID: MB 860-63766/48

Matrix: Water

Analysis Batch: 63766

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			08/05/22 21:27	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/05/22 21:27	1

Lab Sample ID: MB 860-63766/78

Matrix: Water

Analysis Batch: 63766

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			08/06/22 03:22	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/06/22 03:22	1

Lab Sample ID: LCS 860-63766/49

Matrix: Water

Analysis Batch: 63766

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	9.932		mg/L		99	80 - 120
Nitrite as N	5.00	5.025		mg/L		100	80 - 120

Lab Sample ID: LCS 860-63766/6

Matrix: Water

Analysis Batch: 63766

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	10.08		mg/L		101	80 - 120
Nitrite as N	5.00	5.110		mg/L		102	80 - 120

Lab Sample ID: LCS 860-63766/79

Matrix: Water

Analysis Batch: 63766

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	9.766		mg/L		98	80 - 120
Nitrite as N	5.00	4.942		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-63766/50

Matrix: Water

Analysis Batch: 63766

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	9.932		mg/L		99	80 - 120	2	20
Nitrite as N	5.00	5.071		mg/L		101	80 - 120	3	20

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 860-63766/7

Matrix: Water

Analysis Batch: 63766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Nitrate as N	10.0	10.08		mg/L		101	80 - 120		2	20
Nitrite as N	5.00	5.148		mg/L		103	80 - 120		2	20

Lab Sample ID: LCSD 860-63766/80

Matrix: Water

Analysis Batch: 63766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Nitrate as N	10.0	9.734		mg/L		97	80 - 120		0	20
Nitrite as N	5.00	4.980		mg/L		100	80 - 120		1	20

Lab Sample ID: LLCS 860-63766/4

Matrix: Water

Analysis Batch: 63766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Nitrate as N	0.100	0.09632	J	mg/L		96	50 - 150			
Nitrite as N	0.100	0.09264	J	mg/L		93	50 - 150			

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-63952/5

Matrix: Water

Analysis Batch: 63952

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	mg/L			08/06/22 11:28		1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			08/06/22 11:28		1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			08/06/22 11:28		1

Lab Sample ID: LCS 860-63952/6

Matrix: Water

Analysis Batch: 63952

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Alkalinity	250	251.1		mg/L		100	85 - 115			

Lab Sample ID: LCSD 860-63952/7

Matrix: Water

Analysis Batch: 63952

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Alkalinity	250	251.1		mg/L		100	85 - 115		0	20

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-64017/1

Matrix: Water

Analysis Batch: 64017

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			08/08/22 14:45	1

Lab Sample ID: LCS 860-64017/2

Matrix: Water

Analysis Batch: 64017

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	46.40		mg/L		93	80 - 120

Lab Sample ID: LCSD 860-64017/3

Matrix: Water

Analysis Batch: 64017

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	46.40		mg/L		93	80 - 120	0	20

Lab Sample ID: 880-17779-1 MS

Matrix: Water

Analysis Batch: 64017

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	0.800	J	50.0	45.80		mg/L		90	80 - 120

Lab Sample ID: 880-17779-1 MSD

Matrix: Water

Analysis Batch: 64017

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	RPD Limit
Sulfide	0.800	J	50.0	45.80		mg/L		90	80 - 120	0	20

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 63719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	8260C	
880-17779-2	MW-2	Total/NA	Water	8260C	
MB 860-63719/10	Method Blank	Total/NA	Water	8260C	
LCS 860-63719/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-63719/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 63188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	8015 NM	
880-17779-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 63776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	8015B NM	63846
880-17779-2	MW-2	Total/NA	Water	8015B NM	63846
MB 860-63846/1-A	Method Blank	Total/NA	Water	8015B NM	63846
LCS 860-63846/2-A	Lab Control Sample	Total/NA	Water	8015B NM	63846
LCSD 860-63846/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	63846

Prep Batch: 63846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-17779-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-63846/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-63846/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-63846/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 63765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	300.0	
880-17779-2	MW-2	Total/NA	Water	300.0	
MB 860-63765/3	Method Blank	Total/NA	Water	300.0	
MB 860-63765/48	Method Blank	Total/NA	Water	300.0	
MB 860-63765/78	Method Blank	Total/NA	Water	300.0	
LCS 860-63765/49	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63765/6	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63765/79	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-63765/50	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63765/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63765/80	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-63765/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 63766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	300.0	
880-17779-2	MW-2	Total/NA	Water	300.0	
MB 860-63766/3	Method Blank	Total/NA	Water	300.0	
MB 860-63766/48	Method Blank	Total/NA	Water	300.0	

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-17779-1

Project/Site: South Hobbs - 03B1417002

HPLC/IC (Continued)

Analysis Batch: 63766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-63766/78	Method Blank	Total/NA	Water	300.0	
LCS 860-63766/49	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63766/6	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-63766/79	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-63766/50	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63766/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-63766/80	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-63766/4	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 63889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-17779-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 63952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	SM 2320B	
880-17779-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-63952/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-63952/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-63952/7	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 64017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-17779-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-64017/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-64017/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-64017/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-17779-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-17779-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 64152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17779-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-17779-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Eurofins Midland

Lab Chronicle

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-17779-1

Client Sample ID: MW-1

Date Collected: 08/04/22 11:50

Date Received: 08/04/22 16:49

Lab Sample ID: 880-17779-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	63719	NA	EET HOU	08/05/22 15:03
Total/NA	Analysis	8015 NM		1	63188	DD	EET HOU	08/08/22 18:18
Total/NA	Prep	8015NM Aq Prep			63846	SAR	EET HOU	08/05/22 15:46
Total/NA	Analysis	8015B NM		1	63776	SAR	EET HOU	08/05/22 18:45
Total/NA	Analysis	300.0		1	63765	ANP	EET HOU	08/05/22 14:57
Total/NA	Analysis	300.0		1	63766	ANP	EET HOU	08/05/22 14:57
Total/NA	Analysis	SM 2320B		1	63952	TL	EET HOU	08/06/22 14:27
Total/NA	Analysis	SM 4500 CO2 D		1	64152	AA	EET HOU	08/09/22 10:42
Total/NA	Analysis	SM 4500 H+ B		1	63889	TL	EET HOU	08/06/22 11:17
Total/NA	Analysis	SM 4500 S2 F		1	64017	YGG	EET HOU	08/08/22 14:45

Client Sample ID: MW-2

Date Collected: 08/04/22 13:10

Date Received: 08/04/22 16:49

Lab Sample ID: 880-17779-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	63719	NA	EET HOU	08/05/22 15:24
Total/NA	Analysis	8015 NM		1	63188	DD	EET HOU	08/08/22 18:18
Total/NA	Prep	8015NM Aq Prep			63846	SAR	EET HOU	08/05/22 15:47
Total/NA	Analysis	8015B NM		1	63776	SAR	EET HOU	08/05/22 19:04
Total/NA	Analysis	300.0		1	63765	ANP	EET HOU	08/05/22 15:09
Total/NA	Analysis	300.0		1	63766	ANP	EET HOU	08/05/22 15:09
Total/NA	Analysis	SM 2320B		1	63952	TL	EET HOU	08/06/22 14:42
Total/NA	Analysis	SM 4500 CO2 D		1	64152	AA	EET HOU	08/09/22 10:42
Total/NA	Analysis	SM 4500 H+ B		1	63889	TL	EET HOU	08/06/22 11:18
Total/NA	Analysis	SM 4500 S2 F		1	64017	YGG	EET HOU	08/08/22 14:45

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: 880-17779-1

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: 880-17779-1

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: 880-17779-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17779-1	MW-1	Water	08/04/22 11:50	08/04/22 16:49
880-17779-2	MW-2	Water	08/04/22 13:10	08/04/22 16:49

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



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) 94-1286
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-5800) Tampa, FL (813-575-392-7550)

Work Order No. 17779

8/16/2022

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

Program: ☒ US/PS ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables. EDD ☐ ADaPT ☐ Other ☐	

Work Order Comments	

Project Name:		South Hobbs		Turn Around		ANALYSIS REQUEST	Work Order Notes
Project Number:		03B1417002		Routine ☐			
P.O. Number:		03B1417002		Rush 24 Hr			
Sampler's Name:		Shane Diller		Due Date:			
SAMPLE RECEIPT		Temp Blank:		Yes ☐ No ☒			
Temperature (°C):		1.81.5		Thermometer ID			
Received In tact:		Yes ☒ No ☐					
Cooler Custody Seals:		Yes ☐ No ☒		Correction Factor:		- .20	
Sample Custody Seals:		Yes ☐ No ☒		Total Containers:			
Number of Containers							
Reduced Carbon Dioxide 4500 CO2 c							
Reduced Sulfide SW-846 #376.2							
SW-846 #8260							
SW-846 Method #8015							
SW-846 Method #846 300							
SW-846 Method 150.1							
 880-17779 Chain of Custody TAT starts the day received by the lab, if received by 4:30pm							

[illegible]

CUSTODY SEAL
Date 8-4-22
Signature [Signature]

Thermo
SCIENTIFIC

50006

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 SiO ₂ 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 : Hd		

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
		8/4/22			
		10:49			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-17779-1

Login Number: 17779

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: 880-17779-1

Login Number: 17779

List Number: 2

Creator: Bolch, Taylor

List Source: Eurofins Houston

List Creation: 08/05/22 12:03 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
America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-17975-1

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

Authorized for release by:

8/24/2022 2:32:11 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: 880-17975-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-17975-1
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
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
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.
E	Result exceeded calibration range.
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)

Definitions/Glossary

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

Job ID: 880-17975-1
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: 880-17975-1
SDG: Hobbs NM

Job ID: 880-17975-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-17975-1

Receipt

The sample was received on 8/10/2022 4:25 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 3.5°C

GC/MS VOA

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-64649 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

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 860-64694 and analytical batch 860-64998 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 200.7: Due to the high concentration of Calcium and Sodium, the matrix spike(MS) for preparation batch 860-64694 and analytical batch 860-64998 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) 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: 880-17975-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-17975-1

Date Collected: 08/10/22 10:50

Matrix: Water

Date Received: 08/10/22 16:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00308		0.00100	0.000533	mg/L		08/12/22 12:00	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		08/12/22 12:00	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		08/12/22 12:00	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		08/12/22 12:00	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		08/12/22 12:00	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		08/12/22 12:00	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		08/12/22 12:00	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		08/12/22 12:00	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		08/12/22 12:00	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		08/12/22 12:00	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		08/12/22 12:00	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		08/12/22 12:00	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		08/12/22 12:00	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		08/12/22 12:00	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		08/12/22 12:00	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		08/12/22 12:00	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		08/12/22 12:00	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		08/12/22 12:00	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		08/12/22 12:00	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		08/12/22 12:00	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/12/22 12:00	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/12/22 12:00	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		08/12/22 12:00	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		08/12/22 12:00	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L		08/12/22 12:00	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L		08/12/22 12:00	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L		08/12/22 12:00	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L		08/12/22 12:00	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L		08/12/22 12:00	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L		08/12/22 12:00	1
Ethylbenzene	0.0105		0.00100	0.000411	mg/L		08/12/22 12:00	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L		08/12/22 12:00	1
Isopropylbenzene	0.00484		0.00100	0.000613	mg/L		08/12/22 12:00	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L		08/12/22 12:00	1
m,p-Xylenes	0.0410		0.0100	0.00124	mg/L		08/12/22 12:00	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L		08/12/22 12:00	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L		08/12/22 12:00	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644	mg/L		08/12/22 12:00	1
N-Propylbenzene	0.00245		0.00100	0.000498	mg/L		08/12/22 12:00	1
o-Xylene	0.00645		0.00100	0.000551	mg/L		08/12/22 12:00	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919	mg/L		08/12/22 12:00	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468	mg/L		08/12/22 12:00	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L		08/12/22 12:00	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L		08/12/22 12:00	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L		08/12/22 12:00	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L		08/12/22 12:00	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L		08/12/22 12:00	1
Toluene	0.0225		0.00100	0.000475	mg/L		08/12/22 12:00	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L		08/12/22 12:00	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-17975-1

Date Collected: 08/10/22 10:50

Matrix: Water

Date Received: 08/10/22 16:25

Method: 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			08/12/22 12:00	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/12/22 12:00	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/12/22 12:00	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/12/22 12:00	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/12/22 12:00	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/12/22 12:00	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/12/22 12:00	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/12/22 12:00	1
1,2,4-Trimethylbenzene	0.00976		0.00100	0.000417 mg/L			08/12/22 12:00	1
1,3,5-Trimethylbenzene	0.00298		0.00100	0.000456 mg/L			08/12/22 12:00	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/12/22 12:00	1
Xylenes, Total	0.0475		0.0100	0.00124 mg/L			08/12/22 12:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		74 - 124		08/12/22 12:00	1
Dibromofluoromethane (Surr)	109		75 - 131		08/12/22 12:00	1
1,2-Dichloroethane-d4 (Surr)	116		63 - 144		08/12/22 12:00	1
Toluene-d8 (Surr)	105		80 - 117		08/12/22 12:00	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.464	J	0.500	0.0711 mg/L			08/12/22 07:07	1
Nitrate as N	0.103		0.100	0.0391 mg/L			08/12/22 07:07	1
Chloride	215		0.500	0.200 mg/L			08/12/22 07:07	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/12/22 07:07	1
Fluoride	0.475	J	0.500	0.100 mg/L			08/12/22 07:07	1
Sulfate	44.3		0.500	0.109 mg/L			08/12/22 07:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	278		10.0	5.76 mg/L		08/12/22 10:00	08/12/22 17:34	50
Magnesium	53.6		0.200	0.0428 mg/L		08/12/22 10:00	08/12/22 17:16	1
Potassium	4.27		0.500	0.0914 mg/L		08/12/22 10:00	08/12/22 17:16	1
Sodium	78.9		0.500	0.152 mg/L		08/12/22 10:00	08/12/22 17:16	1
SiO2	66.0		1.07	0.471 mg/L		08/12/22 10:00	08/12/22 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	3.02			%			08/24/22 13:51	1
Alkalinity	567		4.00	4.00 mg/L			08/12/22 12:42	1
Bicarbonate Alkalinity as CaCO3	567		4.00	4.00 mg/L			08/12/22 12:42	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/12/22 12:42	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/12/22 12:42	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			08/12/22 12:42	1
Total Dissolved Solids	1160		10.0	10.0 mg/L			08/11/22 16:45	1
pH	6.5	HF		SU			08/12/22 16:03	1
Temperature	20.5	HF		Degrees C			08/12/22 16:03	1

Eurofins Midland

Surrogate Summary

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

Job ID: 880-17975-1
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)
860-31172-E-1 MS	Matrix Spike	104	111	110	102
880-17975-1	Levey Well	104	109	116	105
LCS 860-64649/3	Lab Control Sample	104	111	110	102
LCSD 860-64649/4	Lab Control Sample Dup	103	111	110	101
MB 860-64649/10	Method Blank	107	109	114	103
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: 880-17975-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-64649/10

Matrix: Water

Analysis Batch: 64649

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			08/12/22 10:38	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/12/22 10:38	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/12/22 10:38	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/12/22 10:38	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/12/22 10:38	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/12/22 10:38	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/12/22 10:38	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/12/22 10:38	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/12/22 10:38	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/12/22 10:38	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/12/22 10:38	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/12/22 10:38	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/12/22 10:38	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/12/22 10:38	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/12/22 10:38	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/12/22 10:38	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/12/22 10:38	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/12/22 10:38	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/12/22 10:38	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/12/22 10:38	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/12/22 10:38	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/12/22 10:38	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/12/22 10:38	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/12/22 10:38	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/12/22 10:38	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/12/22 10:38	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/12/22 10:38	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/12/22 10:38	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/12/22 10:38	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/12/22 10:38	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/12/22 10:38	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/12/22 10:38	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/12/22 10:38	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/12/22 10:38	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/12/22 10:38	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/12/22 10:38	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/12/22 10:38	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/12/22 10:38	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/12/22 10:38	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/12/22 10:38	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/12/22 10:38	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/12/22 10:38	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/12/22 10:38	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/12/22 10:38	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/12/22 10:38	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/12/22 10:38	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/12/22 10:38	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/12/22 10:38	1

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QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-64649/10

Matrix: Water

Analysis Batch: 64649

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			08/12/22 10:38	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/12/22 10:38	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/12/22 10:38	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/12/22 10:38	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/12/22 10:38	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/12/22 10:38	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/12/22 10:38	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/12/22 10:38	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/12/22 10:38	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/12/22 10:38	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/12/22 10:38	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/12/22 10:38	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/12/22 10:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		74 - 124		08/12/22 10:38	1
Dibromofluoromethane (Surr)	109		75 - 131		08/12/22 10:38	1
1,2-Dichloroethane-d4 (Surr)	114		63 - 144		08/12/22 10:38	1
Toluene-d8 (Surr)	103		80 - 117		08/12/22 10:38	1

Lab Sample ID: LCS 860-64649/3

Matrix: Water

Analysis Batch: 64649

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	0.04793		mg/L		96	66 - 142
Bromobenzene	0.0500	0.04450		mg/L		89	75 - 125
Bromochloromethane	0.0500	0.05151		mg/L		103	60 - 140
Bromodichloromethane	0.0500	0.04733		mg/L		95	75 - 125
Bromoform	0.0500	0.03873		mg/L		77	75 - 125
Bromomethane	0.0500	0.05519		mg/L		110	60 - 140
2-Butanone	0.250	0.2456		mg/L		98	60 - 140
Carbon tetrachloride	0.0500	0.04905		mg/L		98	62 - 125
Chlorobenzene	0.0500	0.04484		mg/L		90	60 - 133
Chloroethane	0.0500	0.04781		mg/L		96	60 - 140
Chloroform	0.0500	0.05328		mg/L		107	70 - 130
Chloromethane	0.0500	0.04804		mg/L		96	60 - 140
2-Chlorotoluene	0.0500	0.04751		mg/L		95	73 - 125
4-Chlorotoluene	0.0500	0.04860		mg/L		97	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05356		mg/L		107	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04800		mg/L		96	74 - 125
Dibromochloromethane	0.0500	0.04309		mg/L		86	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04036		mg/L		81	59 - 125
1,2-Dibromoethane	0.0500	0.04725		mg/L		94	73 - 125
1,2-Dichlorobenzene	0.0500	0.04535		mg/L		91	75 - 125
1,3-Dichlorobenzene	0.0500	0.04518		mg/L		90	75 - 125
1,4-Dichlorobenzene	0.0500	0.04496		mg/L		90	75 - 125
Dichlorodifluoromethane	0.0500	0.04652		mg/L		93	70 - 130

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QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-64649/3

Matrix: Water

Analysis Batch: 64649

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	0.05602		mg/L		112	72 - 125
1,2-Dichloroethane	0.0500	0.04951		mg/L		99	68 - 127
1,1-Dichloroethene	0.0500	0.04995		mg/L		100	59 - 172
1,2-Dichloropropane	0.0500	0.04965		mg/L		99	74 - 125
1,3-Dichloropropane	0.0500	0.04811		mg/L		96	75 - 125
2,2-Dichloropropane	0.0500	0.05098		mg/L		102	75 - 125
1,1-Dichloropropene	0.0500	0.05272		mg/L		105	75 - 125
Ethylbenzene	0.0500	0.04529		mg/L		91	75 - 125
Hexachlorobutadiene	0.0500	0.04212		mg/L		84	75 - 125
Isopropylbenzene	0.0500	0.04373		mg/L		87	75 - 125
Methylene Chloride	0.0500	0.04906		mg/L		98	75 - 125
m,p-Xylenes	0.0500	0.04455		mg/L		89	75 - 125
MTBE	0.0500	0.05189		mg/L		104	65 - 135
Naphthalene	0.0500	0.04438		mg/L		89	70 - 130
n-Butylbenzene	0.0500	0.04925		mg/L		99	75 - 125
N-Propylbenzene	0.0500	0.04816		mg/L		96	75 - 125
o-Xylene	0.0500	0.04453		mg/L		89	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.04558		mg/L		91	75 - 125
sec-Butylbenzene	0.0500	0.04673		mg/L		93	75 - 125
Styrene	0.0500	0.04418		mg/L		88	75 - 125
tert-Butylbenzene	0.0500	0.04492		mg/L		90	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04415		mg/L		88	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04878		mg/L		98	74 - 125
Tetrachloroethene	0.0500	0.04282		mg/L		86	71 - 125
Toluene	0.0500	0.04530		mg/L		91	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04921		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04810		mg/L		96	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04232		mg/L		85	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04406		mg/L		88	75 - 135
1,1,1-Trichloroethane	0.0500	0.05099		mg/L		102	75 - 125
1,1,2-Trichloroethane	0.0500	0.04740		mg/L		95	75 - 127
Trichloroethene	0.0500	0.04465		mg/L		89	62 - 137
Trichlorofluoromethane	0.0500	0.05252		mg/L		105	60 - 140
1,2,3-Trichloropropane	0.0500	0.04651		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04618		mg/L		92	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04640		mg/L		93	60 - 140
Vinyl chloride	0.0500	0.04824		mg/L		96	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		74 - 124
Dibromofluoromethane (Surr)	111		75 - 131
1,2-Dichloroethane-d4 (Surr)	110		63 - 144
Toluene-d8 (Surr)	102		80 - 117

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QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-64649/4

Matrix: Water

Analysis Batch: 64649

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	0.04865		mg/L		97	66 - 142	1	25
Bromobenzene	0.0500	0.04422		mg/L		88	75 - 125	1	25
Bromochloromethane	0.0500	0.05145		mg/L		103	60 - 140	0	25
Bromodichloromethane	0.0500	0.04758		mg/L		95	75 - 125	1	25
Bromoform	0.0500	0.03939		mg/L		79	75 - 125	2	25
Bromomethane	0.0500	0.05572		mg/L		111	60 - 140	1	25
2-Butanone	0.250	0.2444		mg/L		98	60 - 140	0	25
Carbon tetrachloride	0.0500	0.05071		mg/L		101	62 - 125	3	25
Chlorobenzene	0.0500	0.04618		mg/L		92	60 - 133	3	25
Chloroethane	0.0500	0.04881		mg/L		98	60 - 140	2	25
Chloroform	0.0500	0.05385		mg/L		108	70 - 130	1	25
Chloromethane	0.0500	0.04884		mg/L		98	60 - 140	2	25
2-Chlorotoluene	0.0500	0.04779		mg/L		96	73 - 125	1	25
4-Chlorotoluene	0.0500	0.04842		mg/L		97	74 - 125	0	25
cis-1,2-Dichloroethene	0.0500	0.05353		mg/L		107	75 - 125	0	25
cis-1,3-Dichloropropene	0.0500	0.04828		mg/L		97	74 - 125	1	25
Dibromochloromethane	0.0500	0.04325		mg/L		87	73 - 125	0	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04205		mg/L		84	59 - 125	4	25
1,2-Dibromoethane	0.0500	0.04743		mg/L		95	73 - 125	0	25
1,2-Dichlorobenzene	0.0500	0.04513		mg/L		90	75 - 125	0	25
1,3-Dichlorobenzene	0.0500	0.04498		mg/L		90	75 - 125	0	25
1,4-Dichlorobenzene	0.0500	0.04489		mg/L		90	75 - 125	0	25
Dichlorodifluoromethane	0.0500	0.04781		mg/L		96	70 - 130	3	25
1,1-Dichloroethane	0.0500	0.05598		mg/L		112	72 - 125	0	25
1,2-Dichloroethane	0.0500	0.04974		mg/L		99	68 - 127	0	25
1,1-Dichloroethene	0.0500	0.05289		mg/L		106	59 - 172	6	25
1,2-Dichloropropane	0.0500	0.04951		mg/L		99	74 - 125	0	25
1,3-Dichloropropane	0.0500	0.04823		mg/L		96	75 - 125	0	25
2,2-Dichloropropane	0.0500	0.05121		mg/L		102	75 - 125	0	25
1,1-Dichloropropene	0.0500	0.05428		mg/L		109	75 - 125	3	25
Ethylbenzene	0.0500	0.04709		mg/L		94	75 - 125	4	25
Hexachlorobutadiene	0.0500	0.04533		mg/L		91	75 - 125	7	25
Isopropylbenzene	0.0500	0.04614		mg/L		92	75 - 125	5	25
Methylene Chloride	0.0500	0.04922		mg/L		98	75 - 125	0	25
m,p-Xylenes	0.0500	0.04661		mg/L		93	75 - 125	5	25
MTBE	0.0500	0.05164		mg/L		103	65 - 135	0	25
Naphthalene	0.0500	0.04503		mg/L		90	70 - 130	1	25
n-Butylbenzene	0.0500	0.05166		mg/L		103	75 - 125	5	25
N-Propylbenzene	0.0500	0.04956		mg/L		99	75 - 125	3	25
o-Xylene	0.0500	0.04550		mg/L		91	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04830		mg/L		97	75 - 125	6	25
sec-Butylbenzene	0.0500	0.04930		mg/L		99	75 - 125	5	25
Styrene	0.0500	0.04497		mg/L		90	75 - 125	2	25
tert-Butylbenzene	0.0500	0.04701		mg/L		94	75 - 125	5	25
1,1,1,2-Tetrachloroethane	0.0500	0.04466		mg/L		89	72 - 125	1	25
1,1,1,2,2-Tetrachloroethane	0.0500	0.04849		mg/L		97	74 - 125	1	25
Tetrachloroethene	0.0500	0.04563		mg/L		91	71 - 125	6	25
Toluene	0.0500	0.04605		mg/L		92	59 - 139	2	25

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QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-64649/4

Matrix: Water

Analysis Batch: 64649

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	0.04983		mg/L		100	75 - 125	1	25
trans-1,3-Dichloropropene	0.0500	0.04836		mg/L		97	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.04338		mg/L		87	75 - 137	2	25
1,2,4-Trichlorobenzene	0.0500	0.04412		mg/L		88	75 - 135	0	25
1,1,1-Trichloroethane	0.0500	0.05280		mg/L		106	75 - 125	3	25
1,1,2-Trichloroethane	0.0500	0.04830		mg/L		97	75 - 127	2	25
Trichloroethene	0.0500	0.04682		mg/L		94	62 - 137	5	25
Trichlorofluoromethane	0.0500	0.05546		mg/L		111	60 - 140	5	25
1,2,3-Trichloropropane	0.0500	0.04686		mg/L		94	75 - 125	1	25
1,2,4-Trimethylbenzene	0.0500	0.04665		mg/L		93	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.04787		mg/L		96	60 - 140	3	25
Vinyl chloride	0.0500	0.04994		mg/L		100	60 - 140	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	111		75 - 131
1,2-Dichloroethane-d4 (Surr)	110		63 - 144
Toluene-d8 (Surr)	101		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-64595/3

Matrix: Water

Analysis Batch: 64595

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			08/11/22 16:00	1
Chloride	<0.200	U	0.500	0.200 mg/L			08/11/22 16:00	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/11/22 16:00	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/11/22 16:00	1

Lab Sample ID: MB 860-64595/44

Matrix: Water

Analysis Batch: 64595

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			08/12/22 03:25	1
Chloride	<0.200	U	0.500	0.200 mg/L			08/12/22 03:25	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/12/22 03:25	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/12/22 03:25	1

Lab Sample ID: LCS 860-64595/46

Matrix: Water

Analysis Batch: 64595

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	10.51		mg/L		105	90 - 110
Chloride	10.0	10.09		mg/L		101	90 - 110
Fluoride	10.0	10.74		mg/L		107	90 - 110

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QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-64595/46

Matrix: Water

Analysis Batch: 64595

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	9.940		mg/L		99	90 - 110

Lab Sample ID: LCSD 860-64595/47

Matrix: Water

Analysis Batch: 64595

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	10.53		mg/L		105	90 - 110	0	20
Chloride	10.0	10.04		mg/L		100	90 - 110	1	20
Fluoride	10.0	10.75		mg/L		108	90 - 110	0	20
Sulfate	10.0	9.966		mg/L		100	90 - 110	0	20

Lab Sample ID: LCSD 860-64595/7

Matrix: Water

Analysis Batch: 64595

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	10.37		mg/L		104	90 - 110	0	20
Chloride	10.0	9.970		mg/L		100	90 - 110	0	20
Fluoride	10.0	10.68		mg/L		107	90 - 110	1	20
Sulfate	10.0	9.854		mg/L		99	90 - 110	0	20

Lab Sample ID: LLCS 860-64595/5

Matrix: Water

Analysis Batch: 64595

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	0.5268		mg/L		105	50 - 150
Chloride	0.500	0.5468		mg/L		109	50 - 150
Fluoride	0.500	0.4394	J	mg/L		88	50 - 150
Sulfate	0.500	0.5550		mg/L		111	50 - 150

Lab Sample ID: MB 860-64596/3

Matrix: Water

Analysis Batch: 64596

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			08/11/22 16:00	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/11/22 16:00	1

Lab Sample ID: MB 860-64596/44

Matrix: Water

Analysis Batch: 64596

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			08/12/22 03:25	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/12/22 03:25	1

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QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-64596/46

Matrix: Water

Analysis Batch: 64596

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	10.14		mg/L		101	80 - 120
Nitrite as N	5.00	5.392		mg/L		108	80 - 120

Lab Sample ID: LCSD 860-64596/47

Matrix: Water

Analysis Batch: 64596

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	10.13		mg/L		101	80 - 120	0	20
Nitrite as N	5.00	5.434		mg/L		109	80 - 120	1	20

Lab Sample ID: LCSD 860-64596/7

Matrix: Water

Analysis Batch: 64596

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	10.10		mg/L		101	80 - 120	0	20
Nitrite as N	5.00	5.372		mg/L		107	80 - 120	0	20

Lab Sample ID: LLCS 860-64596/13

Matrix: Water

Analysis Batch: 64596

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	0.1462		mg/L		146	50 - 150
Nitrite as N	0.100	0.09395	J	mg/L		94	50 - 150

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-64694/1-A

Matrix: Water

Analysis Batch: 64998

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 64694

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		08/12/22 10:00	08/12/22 17:05	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		08/12/22 10:00	08/12/22 17:05	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		08/12/22 10:00	08/12/22 17:05	1
Sodium	<0.152	U	0.500	0.152 mg/L		08/12/22 10:00	08/12/22 17:05	1
SiO2	<0.471	U	1.07	0.471 mg/L		08/12/22 10:00	08/12/22 17:05	1

Lab Sample ID: LCS 860-64694/2-A

Matrix: Water

Analysis Batch: 64998

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 64694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	24.98		mg/L		100	85 - 115
Magnesium	25.0	24.65		mg/L		99	85 - 115
Potassium	10.0	9.865		mg/L		99	85 - 115
Sodium	25.0	24.19		mg/L		97	85 - 115
SiO2	21.4	20.94		mg/L		98	85 - 115

Eurofins Midland

QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LCSD 860-64694/3-A
Matrix: Water
Analysis Batch: 64998

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 64694

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Calcium	25.0	25.12		mg/L		100	85 - 115		1	20
Magnesium	25.0	24.83		mg/L		99	85 - 115		1	20
Potassium	10.0	9.890		mg/L		99	85 - 115		0	20
Sodium	25.0	24.41		mg/L		98	85 - 115		1	20
SiO2	21.4	21.03		mg/L		98	85 - 115		0	20

Lab Sample ID: LLCS 860-64694/4-A
Matrix: Water
Analysis Batch: 64998

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 64694

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Calcium	0.200	0.1812	J	mg/L		91	50 - 150			
Magnesium	0.200	0.1974	J	mg/L		99	50 - 150			
Potassium	0.500	0.4687	J	mg/L		94	50 - 150			
Sodium	0.500	0.4336	J	mg/L		87	50 - 150			
SiO2	1.07	0.9658	J	mg/L		90	50 - 150			

Lab Sample ID: 880-17975-1 MS
Matrix: Water
Analysis Batch: 64998

Client Sample ID: Levey Well
Prep Type: Total Recoverable
Prep Batch: 64694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits			
Calcium	269	E	25.0	289.0	E 4	mg/L		81	70 - 130			
Magnesium	53.6		25.0	77.70		mg/L		97	70 - 130			
Potassium	4.27		10.0	14.73		mg/L		105	70 - 130			
Sodium	78.9		25.0	102.8		mg/L		95	70 - 130			
SiO2	66.0		21.4	87.13		mg/L		99	70 - 130			

Lab Sample ID: 880-17975-1 MSD
Matrix: Water
Analysis Batch: 64998

Client Sample ID: Levey Well
Prep Type: Total Recoverable
Prep Batch: 64694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits			
Calcium	269	E	25.0	289.0	E 4	mg/L		82	70 - 130		0	20
Magnesium	53.6		25.0	77.77		mg/L		97	70 - 130		0	20
Potassium	4.27		10.0	14.75		mg/L		105	70 - 130		0	20
Sodium	78.9		25.0	103.2		mg/L		97	70 - 130		0	20
SiO2	66.0		21.4	87.05		mg/L		98	70 - 130		0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-64785/4
Matrix: Water
Analysis Batch: 64785

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			08/12/22 11:33	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/12/22 11:33	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/12/22 11:33	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/12/22 11:33	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-17975-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 860-64785/4

Matrix: Water

Analysis Batch: 64785

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			08/12/22 11:33	1

Lab Sample ID: LCS 860-64785/5

Matrix: Water

Analysis Batch: 64785

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	249.4		mg/L		100	85 - 115

Lab Sample ID: LCSD 860-64785/6

Matrix: Water

Analysis Batch: 64785

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	252.5		mg/L		101	85 - 115	1	20

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

Lab Sample ID: MB 860-64623/1

Matrix: Water

Analysis Batch: 64623

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			08/11/22 16:45	1

Lab Sample ID: LCS 860-64623/2

Matrix: Water

Analysis Batch: 64623

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	991.0		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-64623/3

Matrix: Water

Analysis Batch: 64623

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	1006		mg/L		101	80 - 120	2	10

Lab Sample ID: 880-17975-1 DU

Matrix: Water

Analysis Batch: 64623

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1160		1060		mg/L		9	10

Eurofins Midland

QC Association Summary

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

Job ID: 880-17975-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 64649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total/NA	Water	8260C	
MB 860-64649/10	Method Blank	Total/NA	Water	8260C	
LCS 860-64649/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-64649/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 64595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total/NA	Water	300.0	
MB 860-64595/3	Method Blank	Total/NA	Water	300.0	
MB 860-64595/44	Method Blank	Total/NA	Water	300.0	
LCS 860-64595/46	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-64595/47	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-64595/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-64595/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 64596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total/NA	Water	300.0	
MB 860-64596/3	Method Blank	Total/NA	Water	300.0	
MB 860-64596/44	Method Blank	Total/NA	Water	300.0	
LCS 860-64596/46	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-64596/47	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-64596/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-64596/13	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 64694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-64694/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-64694/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-64694/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-64694/4-A	Lab Control Sample	Total Recoverable	Water	200.7	
880-17975-1 MS	Levey Well	Total Recoverable	Water	200.7	
880-17975-1 MSD	Levey Well	Total Recoverable	Water	200.7	

Analysis Batch: 64998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	64694
880-17975-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	64694
MB 860-64694/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	64694
LCS 860-64694/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	64694
LCSD 860-64694/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	64694
LLCS 860-64694/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	64694
880-17975-1 MS	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	64694
880-17975-1 MSD	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	64694

Eurofins Midland

QC Association Summary

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

Job ID: 880-17975-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 64623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-64623/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-64623/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-64623/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
880-17975-1 DU	Levey Well	Total/NA	Water	SM 2540C	

Analysis Batch: 64785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-64785/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-64785/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-64785/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 64799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 66403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17975-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-17975-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-17975-1
Date Collected: 08/10/22 10:50 Matrix: Water
Date Received: 08/10/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	64649	NA	EET HOU	08/12/22 12:00
Total/NA	Analysis	300.0		1	64595	RBNS	EET HOU	08/12/22 07:07
Total/NA	Analysis	300.0		1	64596	RBNS	EET HOU	08/12/22 07:07
Total Recoverable	Prep	200.7			64694	MD	EET HOU	08/12/22 10:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	64998	DP	EET HOU	08/12/22 17:16
Total Recoverable	Prep	200.7			64694	MD	EET HOU	08/12/22 10:00
Total Recoverable	Analysis	200.7 Rev 4.4		50	64998	DP	EET HOU	08/12/22 17:34
Total/NA	Analysis	SM 1030E		1	66403	DP	EET HOU	08/24/22 13:51
Total/NA	Analysis	SM 2320B		1	64785	TL	EET HOU	08/12/22 12:42
Total/NA	Analysis	SM 2540C		1	64623	MCA	EET HOU	08/11/22 16:45
Total/NA	Analysis	SM 4500 H+ B		1	64799	TL	EET HOU	08/12/22 16:03

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: 880-17975-1
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: 880-17975-1
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: 880-17975-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17975-1	Levey Well	Water	08/10/22 10:50	08/10/22 16:25

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



Chain of Custody

Work Order No: 1925

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)555-3443 Lubbock, TX (806)794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 975-392-7550
Hobbs, NM (575-392-7550)

Page 1 of 1

Project Manager:	Beaux Jennings	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Wadley #210	Address:	
City, State ZIP:	Midland TX	City, State ZIP:	
Phone:	432-230-3344	Email:	bjennings@ensolum.com

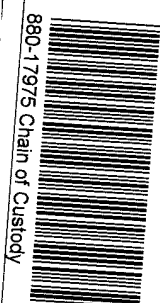
Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ Level IV ☐	
Deliverables EDD ☐ ADAPT ☐ Other: _____	

Project Name:	Lewey 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):		3.3/3.5			Thermometer ID		
Received intact:		Yes	No		170		
Cooler Custody Seals:		Yes	No	N/A	Correction Factor:	-1.2	
Sample Custody Seals:		Yes	No	N/A	Total Containers:		

[illegible][illegible]

880-17975 Chain of Custody



880-17975 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	SiO ₂	Na	Sr	Tl	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	Tl	U											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
1 		8/10/02	2		
3			4		
5		1605	6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-17975-1

SDG Number: Hobbs NM

Login Number: 17975

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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?	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: 880-17975-1

SDG Number: Hobbs NM

Login Number: 17975

List Number: 2

Creator: Milone, Jeancarlo

List Source: Eurofins Houston

List Creation: 08/11/22 03:19 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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-17974-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

Authorized for release by:

8/23/2022 6:23:27 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project
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: 880-17974-1

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Definitions/Glossary

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Qualifiers

GC/MS 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.

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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
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.
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.

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: 880-17974-1

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

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

Case Narrative

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

Job ID: 880-17974-1

Job ID: 880-17974-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-17974-1****Receipt**

The samples were received on 8/10/2022 4:25 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 3.5°C

GC/MS VOA

Method 8260C: The matrix spike recoveries for analytical batch 860-64470 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/LCSD) recovery was within acceptance limits.

Method 8260C: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-2 (880-17974-2). Note: pH 5.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside the upper control limit: (LCSD 860-64706/3-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 860-64706 and analytical batch 860-64711 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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 860-64595 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: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-17974-1

Date Collected: 08/10/22 11:15

Matrix: Water

Date Received: 08/10/22 16:25

Method: 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			08/11/22 17:25	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/11/22 17:25	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/11/22 17:25	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/11/22 17:25	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/11/22 17:25	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/11/22 17:25	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/11/22 17:25	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/11/22 17:25	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/11/22 17:25	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/11/22 17:25	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/11/22 17:25	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/11/22 17:25	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/11/22 17:25	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/11/22 17:25	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/11/22 17:25	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/11/22 17:25	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/11/22 17:25	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/11/22 17:25	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/11/22 17:25	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/11/22 17:25	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/11/22 17:25	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/11/22 17:25	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/11/22 17:25	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/11/22 17:25	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/11/22 17:25	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/11/22 17:25	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/11/22 17:25	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/11/22 17:25	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/11/22 17:25	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/11/22 17:25	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/11/22 17:25	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/11/22 17:25	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/11/22 17:25	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/11/22 17:25	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/11/22 17:25	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/11/22 17:25	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/11/22 17:25	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/11/22 17:25	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/11/22 17:25	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/11/22 17:25	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/11/22 17:25	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/11/22 17:25	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/11/22 17:25	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/11/22 17:25	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/11/22 17:25	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/11/22 17:25	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/11/22 17:25	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/11/22 17:25	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			08/11/22 17:25	1

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Client Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-17974-1

Date Collected: 08/10/22 11:15

Matrix: Water

Date Received: 08/10/22 16:25

Method: 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			08/11/22 17:25	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/11/22 17:25	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/11/22 17:25	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/11/22 17:25	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/11/22 17:25	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/11/22 17:25	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/11/22 17:25	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/11/22 17:25	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/11/22 17:25	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/11/22 17:25	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/11/22 17:25	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/11/22 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		08/11/22 17:25	1
Dibromofluoromethane (Surr)	102		75 - 131		08/11/22 17:25	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		08/11/22 17:25	1
Toluene-d8 (Surr)	98		80 - 117		08/11/22 17:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.929	U	4.70	0.929 mg/L			08/12/22 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.929	U	4.70	0.929 mg/L		08/12/22 10:23	08/12/22 12:15	1
Diesel Range Organics (Over C10-C28)	<0.929	U	4.70	0.929 mg/L		08/12/22 10:23	08/12/22 12:15	1
Oil Range Organics (Over C28-C36)	<0.897	U	4.70	0.897 mg/L		08/12/22 10:23	08/12/22 12:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 135			08/12/22 10:23	08/12/22 12:15	1
o-Terphenyl	113		70 - 135			08/12/22 10:23	08/12/22 12:15	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.3		0.500	0.200 mg/L			08/12/22 04:06	1
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			08/12/22 04:06	1
Fluoride	0.737		0.500	0.100 mg/L			08/12/22 04:06	1
Nitrite as N	0.212		0.100	0.0293 mg/L			08/12/22 04:06	1
Sulfate	40.9		0.500	0.109 mg/L			08/12/22 04:06	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	278		4.00	4.00 mg/L			08/12/22 12:16	1
Bicarbonate Alkalinity as CaCO3	278		4.00	4.00 mg/L			08/12/22 12:16	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/12/22 12:16	1
Carbon dioxide	279			mg/L			08/23/22 18:04	1
Carbon Dioxide, Free	35.0			mg/L			08/23/22 18:04	1
pH	7.2	HF		SU			08/12/22 16:09	1

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Client Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-17974-1

Date Collected: 08/10/22 11:15

Matrix: Water

Date Received: 08/10/22 16:25

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature	19.8	HF		Degrees C			08/12/22 16:09	1
Sulfide	1.00	J	5.00	0.495 mg/L			08/16/22 22:36	1

Client Sample ID: MW-2

Lab Sample ID: 880-17974-2

Date Collected: 08/10/22 13:20

Matrix: Water

Date Received: 08/10/22 16:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0248		0.00100	0.000533 mg/L			08/11/22 17:46	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/11/22 17:46	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/11/22 17:46	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/11/22 17:46	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/11/22 17:46	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/11/22 17:46	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/11/22 17:46	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/11/22 17:46	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/11/22 17:46	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/11/22 17:46	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/11/22 17:46	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/11/22 17:46	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/11/22 17:46	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/11/22 17:46	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/11/22 17:46	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/11/22 17:46	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/11/22 17:46	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/11/22 17:46	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/11/22 17:46	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/11/22 17:46	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/11/22 17:46	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/11/22 17:46	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/11/22 17:46	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/11/22 17:46	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/11/22 17:46	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/11/22 17:46	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/11/22 17:46	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/11/22 17:46	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/11/22 17:46	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/11/22 17:46	1
Ethylbenzene	0.0199		0.00100	0.000411 mg/L			08/11/22 17:46	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/11/22 17:46	1
Isopropylbenzene	0.00986		0.00100	0.000613 mg/L			08/11/22 17:46	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/11/22 17:46	1
m,p-Xylenes	0.0900		0.0100	0.00124 mg/L			08/11/22 17:46	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/11/22 17:46	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/11/22 17:46	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/11/22 17:46	1
N-Propylbenzene	0.00271		0.00100	0.000498 mg/L			08/11/22 17:46	1
o-Xylene	0.00758		0.00100	0.000551 mg/L			08/11/22 17:46	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/11/22 17:46	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-17974-2

Date Collected: 08/10/22 13:20

Matrix: Water

Date Received: 08/10/22 16:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.000967	J	0.00100	0.000468 mg/L			08/11/22 17:46	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/11/22 17:46	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/11/22 17:46	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/11/22 17:46	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/11/22 17:46	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/11/22 17:46	1
Toluene	0.00167		0.00100	0.000475 mg/L			08/11/22 17:46	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			08/11/22 17:46	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/11/22 17:46	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/11/22 17:46	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/11/22 17:46	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/11/22 17:46	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/11/22 17:46	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/11/22 17:46	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/11/22 17:46	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/11/22 17:46	1
1,2,4-Trimethylbenzene	0.0309		0.00100	0.000417 mg/L			08/11/22 17:46	1
1,3,5-Trimethylbenzene	0.00779		0.00100	0.000456 mg/L			08/11/22 17:46	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/11/22 17:46	1
Xylenes, Total	0.0976		0.0100	0.00124 mg/L			08/11/22 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		74 - 124		08/11/22 17:46	1
4-Bromofluorobenzene (Surr)	101		74 - 124		08/11/22 18:06	5
Dibromofluoromethane (Surr)	105		75 - 131		08/11/22 17:46	1
Dibromofluoromethane (Surr)	106		75 - 131		08/11/22 18:06	5
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		08/11/22 17:46	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		08/11/22 18:06	5
Toluene-d8 (Surr)	100		80 - 117		08/11/22 17:46	1
Toluene-d8 (Surr)	100		80 - 117		08/11/22 18:06	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.17	J	4.72	0.932 mg/L			08/12/22 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.17	J	4.72	0.932 mg/L		08/12/22 10:23	08/12/22 12:34	1
Diesel Range Organics (Over C10-C28)	<0.932	U	4.72	0.932 mg/L		08/12/22 10:23	08/12/22 12:34	1
Oil Range Organics (Over C28-C36)	<0.900	U	4.72	0.900 mg/L		08/12/22 10:23	08/12/22 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 135	08/12/22 10:23	08/12/22 12:34	1
o-Terphenyl	107		70 - 135	08/12/22 10:23	08/12/22 12:34	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.4		0.500	0.200 mg/L			08/12/22 07:20	1
Nitrate as N	0.189		0.100	0.0391 mg/L			08/12/22 07:20	1

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Client Sample Results

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

Job ID: 880-17974-1

Client Sample ID: MW-2
Date Collected: 08/10/22 13:20
Date Received: 08/10/22 16:25

Lab Sample ID: 880-17974-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.189	J	0.500	0.100	mg/L			08/12/22 07:20	1
Nitrite as N	0.210		0.100	0.0293	mg/L			08/12/22 07:20	1
Sulfate	97.2		0.500	0.109	mg/L			08/12/22 07:20	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1260		4.00	4.00	mg/L			08/12/22 12:32	1
Bicarbonate Alkalinity as CaCO3	1260		4.00	4.00	mg/L			08/12/22 12:32	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			08/12/22 12:32	1
Carbon dioxide	2370				mg/L			08/23/22 18:04	1
Carbon Dioxide, Free	1260				mg/L			08/23/22 18:04	1
pH	6.3	HF			SU			08/12/22 16:05	1
Temperature	19.3	HF			Degrees C			08/12/22 16:05	1
Sulfide	<0.495	U	5.00	0.495	mg/L			08/16/22 22:36	1

Surrogate Summary

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

Job ID: 880-17974-1

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)
860-31051-B-8 MS	Matrix Spike	101	103	101	99
880-17974-1	MW-1	100	102	103	98
880-17974-2	MW-2	103	105	103	100
880-17974-2	MW-2	101	106	103	100
LCS 860-64470/1010	Lab Control Sample	99	101	101	98
LCSD 860-64470/11	Lab Control Sample Dup	101	101	99	99
MB 860-64470/16	Method Blank	101	99	99	97
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)
880-17974-1	MW-1	91	113
880-17974-2	MW-2	83	107
LCS 860-64706/2-A	Lab Control Sample	97	121
LCSD 860-64706/3-A	Lab Control Sample Dup	96	136 S1+
MB 860-64706/1-A	Method Blank	88	110
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-64470/16

Matrix: Water

Analysis Batch: 64470

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			08/11/22 12:18	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/11/22 12:18	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/11/22 12:18	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/11/22 12:18	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/11/22 12:18	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/11/22 12:18	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/11/22 12:18	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/11/22 12:18	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/11/22 12:18	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/11/22 12:18	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/11/22 12:18	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/11/22 12:18	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/11/22 12:18	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/11/22 12:18	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/11/22 12:18	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/11/22 12:18	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/11/22 12:18	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/11/22 12:18	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/11/22 12:18	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/11/22 12:18	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/11/22 12:18	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/11/22 12:18	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/11/22 12:18	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/11/22 12:18	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/11/22 12:18	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/11/22 12:18	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/11/22 12:18	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/11/22 12:18	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/11/22 12:18	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/11/22 12:18	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/11/22 12:18	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/11/22 12:18	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/11/22 12:18	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/11/22 12:18	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/11/22 12:18	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/11/22 12:18	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/11/22 12:18	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/11/22 12:18	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/11/22 12:18	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/11/22 12:18	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/11/22 12:18	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/11/22 12:18	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/11/22 12:18	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/11/22 12:18	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/11/22 12:18	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/11/22 12:18	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/11/22 12:18	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/11/22 12:18	1

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-64470/16

Matrix: Water

Analysis Batch: 64470

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			08/11/22 12:18	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/11/22 12:18	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/11/22 12:18	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/11/22 12:18	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/11/22 12:18	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/11/22 12:18	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/11/22 12:18	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/11/22 12:18	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/11/22 12:18	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/11/22 12:18	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/11/22 12:18	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/11/22 12:18	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/11/22 12:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		08/11/22 12:18	1
Dibromofluoromethane (Surr)	99		75 - 131		08/11/22 12:18	1
1,2-Dichloroethane-d4 (Surr)	99		63 - 144		08/11/22 12:18	1
Toluene-d8 (Surr)	97		80 - 117		08/11/22 12:18	1

Lab Sample ID: LCS 860-64470/1010

Matrix: Water

Analysis Batch: 64470

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	0.04941		mg/L		99	66 - 142
Bromobenzene	0.0500	0.04939		mg/L		99	75 - 125
Bromochloromethane	0.0500	0.05264		mg/L		105	60 - 140
Bromodichloromethane	0.0500	0.05240		mg/L		105	75 - 125
Bromoform	0.0500	0.05613		mg/L		112	75 - 125
Bromomethane	0.0500	0.04630		mg/L		93	60 - 140
2-Butanone	0.250	0.2431		mg/L		97	60 - 140
Carbon tetrachloride	0.0500	0.04904		mg/L		98	62 - 125
Chlorobenzene	0.0500	0.04994		mg/L		100	60 - 133
Chloroethane	0.0500	0.06373		mg/L		127	60 - 140
Chloroform	0.0500	0.05150		mg/L		103	70 - 130
Chloromethane	0.0500	0.06095		mg/L		122	60 - 140
2-Chlorotoluene	0.0500	0.05011		mg/L		100	73 - 125
4-Chlorotoluene	0.0500	0.04998		mg/L		100	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05039		mg/L		101	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05201		mg/L		104	74 - 125
Dibromochloromethane	0.0500	0.05357		mg/L		107	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05555		mg/L		111	59 - 125
1,2-Dibromoethane	0.0500	0.05284		mg/L		106	73 - 125
1,2-Dichlorobenzene	0.0500	0.04956		mg/L		99	75 - 125
1,3-Dichlorobenzene	0.0500	0.05103		mg/L		102	75 - 125
1,4-Dichlorobenzene	0.0500	0.04943		mg/L		99	75 - 125
Dichlorodifluoromethane	0.0500	0.04773		mg/L		95	70 - 130

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-64470/1010

Matrix: Water

Analysis Batch: 64470

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	0.05084		mg/L		102	72 - 125
1,2-Dichloroethane	0.0500	0.05072		mg/L		101	68 - 127
1,1-Dichloroethene	0.0500	0.05572		mg/L		111	59 - 172
1,2-Dichloropropane	0.0500	0.05141		mg/L		103	74 - 125
1,3-Dichloropropane	0.0500	0.05153		mg/L		103	75 - 125
2,2-Dichloropropane	0.0500	0.04957		mg/L		99	75 - 125
1,1-Dichloropropene	0.0500	0.04980		mg/L		100	75 - 125
Ethylbenzene	0.0500	0.05071		mg/L		101	75 - 125
Hexachlorobutadiene	0.0500	0.05454		mg/L		109	75 - 125
Isopropylbenzene	0.0500	0.05078		mg/L		102	75 - 125
Methylene Chloride	0.0500	0.05228		mg/L		105	75 - 125
m,p-Xylenes	0.0500	0.05022		mg/L		100	75 - 125
MTBE	0.0500	0.05783		mg/L		116	65 - 135
Naphthalene	0.0500	0.06043		mg/L		121	70 - 130
n-Butylbenzene	0.0500	0.05017		mg/L		100	75 - 125
N-Propylbenzene	0.0500	0.04883		mg/L		98	75 - 125
o-Xylene	0.0500	0.05027		mg/L		101	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05064		mg/L		101	75 - 125
sec-Butylbenzene	0.0500	0.04943		mg/L		99	75 - 125
Styrene	0.0500	0.05135		mg/L		103	75 - 125
tert-Butylbenzene	0.0500	0.04944		mg/L		99	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05167		mg/L		103	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05038		mg/L		101	74 - 125
Tetrachloroethene	0.0500	0.05270		mg/L		105	71 - 125
Toluene	0.0500	0.05097		mg/L		102	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05742		mg/L		115	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05227		mg/L		105	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.06278		mg/L		126	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05768		mg/L		115	75 - 135
1,1,1-Trichloroethane	0.0500	0.05064		mg/L		101	75 - 125
1,1,2-Trichloroethane	0.0500	0.05428		mg/L		109	75 - 127
Trichloroethene	0.0500	0.05086		mg/L		102	62 - 137
Trichlorofluoromethane	0.0500	0.05563		mg/L		111	60 - 140
1,2,3-Trichloropropane	0.0500	0.05027		mg/L		101	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04940		mg/L		99	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04872		mg/L		97	60 - 140
Vinyl chloride	0.0500	0.05768		mg/L		115	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
1,2-Dichloroethane-d4 (Surr)	101		63 - 144
Toluene-d8 (Surr)	98		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-64470/11

Matrix: Water

Analysis Batch: 64470

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	0.04673		mg/L		93	66 - 142	6	25
Bromobenzene	0.0500	0.05005		mg/L		100	75 - 125	1	25
Bromochloromethane	0.0500	0.05191		mg/L		104	60 - 140	1	25
Bromodichloromethane	0.0500	0.05010		mg/L		100	75 - 125	4	25
Bromoform	0.0500	0.05283		mg/L		106	75 - 125	6	25
Bromomethane	0.0500	0.04351		mg/L		87	60 - 140	6	25
2-Butanone	0.250	0.2317		mg/L		93	60 - 140	5	25
Carbon tetrachloride	0.0500	0.04468		mg/L		89	62 - 125	9	25
Chlorobenzene	0.0500	0.04661		mg/L		93	60 - 133	7	25
Chloroethane	0.0500	0.05906		mg/L		118	60 - 140	8	25
Chloroform	0.0500	0.04898		mg/L		98	70 - 130	5	25
Chloromethane	0.0500	0.05669		mg/L		113	60 - 140	7	25
2-Chlorotoluene	0.0500	0.04809		mg/L		96	73 - 125	4	25
4-Chlorotoluene	0.0500	0.04850		mg/L		97	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.04751		mg/L		95	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.04958		mg/L		99	74 - 125	5	25
Dibromochloromethane	0.0500	0.05136		mg/L		103	73 - 125	4	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05276		mg/L		106	59 - 125	5	25
1,2-Dibromoethane	0.0500	0.04984		mg/L		100	73 - 125	6	25
1,2-Dichlorobenzene	0.0500	0.04885		mg/L		98	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.04965		mg/L		99	75 - 125	3	25
1,4-Dichlorobenzene	0.0500	0.04699		mg/L		94	75 - 125	5	25
Dichlorodifluoromethane	0.0500	0.04834		mg/L		97	70 - 130	1	25
1,1-Dichloroethane	0.0500	0.04828		mg/L		97	72 - 125	5	25
1,2-Dichloroethane	0.0500	0.04897		mg/L		98	68 - 127	4	25
1,1-Dichloroethene	0.0500	0.05273		mg/L		105	59 - 172	6	25
1,2-Dichloropropane	0.0500	0.04943		mg/L		99	74 - 125	4	25
1,3-Dichloropropane	0.0500	0.04896		mg/L		98	75 - 125	5	25
2,2-Dichloropropane	0.0500	0.04447		mg/L		89	75 - 125	11	25
1,1-Dichloropropene	0.0500	0.04619		mg/L		92	75 - 125	8	25
Ethylbenzene	0.0500	0.04630		mg/L		93	75 - 125	9	25
Hexachlorobutadiene	0.0500	0.05104		mg/L		102	75 - 125	7	25
Isopropylbenzene	0.0500	0.04638		mg/L		93	75 - 125	9	25
Methylene Chloride	0.0500	0.05176		mg/L		104	75 - 125	1	25
m,p-Xylenes	0.0500	0.04628		mg/L		93	75 - 125	8	25
MTBE	0.0500	0.05795		mg/L		116	65 - 135	0	25
Naphthalene	0.0500	0.05165		mg/L		103	70 - 130	16	25
n-Butylbenzene	0.0500	0.04841		mg/L		97	75 - 125	4	25
N-Propylbenzene	0.0500	0.04720		mg/L		94	75 - 125	3	25
o-Xylene	0.0500	0.04695		mg/L		94	75 - 125	7	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04822		mg/L		96	75 - 125	5	25
sec-Butylbenzene	0.0500	0.04762		mg/L		95	75 - 125	4	25
Styrene	0.0500	0.04859		mg/L		97	75 - 125	6	25
tert-Butylbenzene	0.0500	0.04699		mg/L		94	75 - 125	5	25
1,1,1,2-Tetrachloroethane	0.0500	0.04990		mg/L		100	72 - 125	3	25
1,1,2,2-Tetrachloroethane	0.0500	0.04932		mg/L		99	74 - 125	2	25
Tetrachloroethene	0.0500	0.04772		mg/L		95	71 - 125	10	25
Toluene	0.0500	0.04723		mg/L		94	59 - 139	8	25

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-64470/11

Matrix: Water

Analysis Batch: 64470

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	0.05451		mg/L		109	75 - 125	5	25
trans-1,3-Dichloropropene	0.0500	0.04985		mg/L		100	66 - 125	5	25
1,2,3-Trichlorobenzene	0.0500	0.05151		mg/L		103	75 - 137	20	25
1,2,4-Trichlorobenzene	0.0500	0.05057		mg/L		101	75 - 135	13	25
1,1,1-Trichloroethane	0.0500	0.04617		mg/L		92	75 - 125	9	25
1,1,2-Trichloroethane	0.0500	0.04950		mg/L		99	75 - 127	9	25
Trichloroethene	0.0500	0.04757		mg/L		95	62 - 137	7	25
Trichlorofluoromethane	0.0500	0.05117		mg/L		102	60 - 140	8	25
1,2,3-Trichloropropane	0.0500	0.04994		mg/L		100	75 - 125	1	25
1,2,4-Trimethylbenzene	0.0500	0.04802		mg/L		96	75 - 125	3	25
1,3,5-Trimethylbenzene	0.0500	0.04768		mg/L		95	60 - 140	2	25
Vinyl chloride	0.0500	0.05410		mg/L		108	60 - 140	6	25

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

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

Lab Sample ID: MB 860-64706/1-A

Matrix: Water

Analysis Batch: 64711

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 64706

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		08/12/22 10:23	08/12/22 11:55	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		08/12/22 10:23	08/12/22 11:55	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		08/12/22 10:23	08/12/22 11:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 135	08/12/22 10:23	08/12/22 11:55	1
o-Terphenyl	110		70 - 135	08/12/22 10:23	08/12/22 11:55	1

Lab Sample ID: LCS 860-64706/2-A

Matrix: Water

Analysis Batch: 64711

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 64706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.9	111.0		mg/L		111	70 - 135
Diesel Range Organics (Over C10-C28)	100	108.5		mg/L		109	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	97		70 - 135
o-Terphenyl	121		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-64706/3-A

Matrix: Water

Analysis Batch: 64711

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 64706

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.9	112.1		mg/L		112	70 - 135	1	35
Diesel Range Organics (Over C10-C28)	100	125.1		mg/L		125	70 - 135	14	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	96		70 - 135						
o-Terphenyl	136	S1+	70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-64595/3

Matrix: Water

Analysis Batch: 64595

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			08/11/22 16:00	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/11/22 16:00	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/11/22 16:00	1

Lab Sample ID: MB 860-64595/44

Matrix: Water

Analysis Batch: 64595

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			08/12/22 03:25	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/12/22 03:25	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/12/22 03:25	1

Lab Sample ID: LCS 860-64595/46

Matrix: Water

Analysis Batch: 64595

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	10.09		mg/L		101	90 - 110
Fluoride	10.0	10.74		mg/L		107	90 - 110
Sulfate	10.0	9.940		mg/L		99	90 - 110

Lab Sample ID: LCS 860-64595/6

Matrix: Water

Analysis Batch: 64595

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	9.988		mg/L		100	90 - 110
Fluoride	10.0	10.63		mg/L		106	90 - 110
Sulfate	10.0	9.825		mg/L		98	90 - 110

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-64595/47

Matrix: Water

Analysis Batch: 64595

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike		LCSD		Unit	D	%Rec	%Rec		RPD	Limit
	Added	Result	Qualifier					Limits	RPD		
Chloride	10.0	10.04			mg/L		100	90 - 110	1		20
Fluoride	10.0	10.75			mg/L		108	90 - 110	0		20
Sulfate	10.0	9.966			mg/L		100	90 - 110	0		20

Lab Sample ID: LCSD 860-64595/7

Matrix: Water

Analysis Batch: 64595

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike		LCSD		Unit	D	%Rec	%Rec		RPD	Limit
	Added	Result	Qualifier					Limits	RPD		
Chloride	10.0	9.970			mg/L		100	90 - 110	0		20
Fluoride	10.0	10.68			mg/L		107	90 - 110	1		20
Sulfate	10.0	9.854			mg/L		99	90 - 110	0		20

Lab Sample ID: LLCS 860-64595/5

Matrix: Water

Analysis Batch: 64595

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike		LLCS		Unit	D	%Rec	%Rec		RPD	Limit
	Added	Result	Qualifier					Limits	RPD		
Chloride	0.500	0.5468			mg/L		109	50 - 150			
Fluoride	0.500	0.4394	J		mg/L		88	50 - 150			
Sulfate	0.500	0.5550			mg/L		111	50 - 150			

Lab Sample ID: 880-17974-1 MS

Matrix: Water

Analysis Batch: 64595

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample		Spike	MS		Unit	D	%Rec	%Rec		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
Chloride	68.3		10.0	77.92	4	mg/L		96	90 - 110			
Fluoride	0.737		10.0	11.45		mg/L		107	90 - 110			
Sulfate	40.9		10.0	50.86	4	mg/L		100	90 - 110			

Lab Sample ID: 880-17974-1 MSD

Matrix: Water

Analysis Batch: 64595

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample		Spike	MSD		Unit	D	%Rec	%Rec		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
Chloride	68.3		10.0	77.89	4	mg/L		96	90 - 110	0		20
Fluoride	0.737		10.0	11.54		mg/L		108	90 - 110	1		20
Sulfate	40.9		10.0	50.94	4	mg/L		100	90 - 110	0		20

Lab Sample ID: MB 860-64596/3

Matrix: Water

Analysis Batch: 64596

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			08/11/22 16:00	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/11/22 16:00	1

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-64596/44

Matrix: Water

Analysis Batch: 64596

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			08/12/22 03:25	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/12/22 03:25	1

Lab Sample ID: LCS 860-64596/46

Matrix: Water

Analysis Batch: 64596

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	10.14		mg/L		101	80 - 120
Nitrite as N	5.00	5.392		mg/L		108	80 - 120

Lab Sample ID: LCS 860-64596/6

Matrix: Water

Analysis Batch: 64596

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	10.07		mg/L		101	80 - 120
Nitrite as N	5.00	5.349		mg/L		107	80 - 120

Lab Sample ID: LCSD 860-64596/47

Matrix: Water

Analysis Batch: 64596

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	10.13		mg/L		101	80 - 120	0	20
Nitrite as N	5.00	5.434		mg/L		109	80 - 120	1	20

Lab Sample ID: LCSD 860-64596/7

Matrix: Water

Analysis Batch: 64596

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	10.10		mg/L		101	80 - 120	0	20
Nitrite as N	5.00	5.372		mg/L		107	80 - 120	0	20

Lab Sample ID: LLCS 860-64596/13

Matrix: Water

Analysis Batch: 64596

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	0.1462		mg/L		146	50 - 150
Nitrite as N	0.100	0.09395	J	mg/L		94	50 - 150

Lab Sample ID: 880-17974-1 MS

Matrix: Water

Analysis Batch: 64596

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
Nitrate as N	<0.0391	U	10.0	10.11		mg/L		101	80 - 120
Nitrite as N	0.212		2.50	2.498		mg/L		91	80 - 120

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QC Sample Results

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-17974-1 MSD

Matrix: Water

Analysis Batch: 64596

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	RPD Limit
Nitrate as N	<0.0391	U	10.0	10.16		mg/L		102	80 - 120	0	15
Nitrite as N	0.212		2.50	2.497		mg/L		91	80 - 120	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-64785/4

Matrix: Water

Analysis Batch: 64785

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			08/12/22 11:33	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/12/22 11:33	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/12/22 11:33	1

Lab Sample ID: LCS 860-64785/5

Matrix: Water

Analysis Batch: 64785

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	249.4		mg/L		100	85 - 115

Lab Sample ID: LCSD 860-64785/6

Matrix: Water

Analysis Batch: 64785

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	252.5		mg/L		101	85 - 115	1	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-65309/1

Matrix: Water

Analysis Batch: 65309

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			08/16/22 22:36	1

Lab Sample ID: LCS 860-65309/2

Matrix: Water

Analysis Batch: 65309

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	46.40		mg/L		93	80 - 120

Lab Sample ID: LCSD 860-65309/3

Matrix: Water

Analysis Batch: 65309

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	46.40		mg/L		93	80 - 120	0	20

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QC Sample Results

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

Job ID: 880-17974-1

Method: SM 4500 S2 F - Sulfide, Total (Continued)

Lab Sample ID: 880-17974-1 MS										Client Sample ID: MW-1		
Matrix: Water										Prep Type: Total/NA		
Analysis Batch: 65309												
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits			
Sulfide	1.00	J	50.0	47.80		mg/L		94	80 - 120			

Lab Sample ID: 880-17974-1 MSD										Client Sample ID: MW-1		
Matrix: Water										Prep Type: Total/NA		
Analysis Batch: 65309												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Sulfide	1.00	J	50.0	47.80		mg/L		94	80 - 120	0	20	

QC Association Summary

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 64470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	8260C	
880-17974-2	MW-2	Total/NA	Water	8260C	
880-17974-2	MW-2	Total/NA	Water	8260C	
MB 860-64470/16	Method Blank	Total/NA	Water	8260C	
LCS 860-64470/1010	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-64470/11	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Prep Batch: 64706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-17974-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-64706/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-64706/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-64706/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 64711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	8015B NM	64706
880-17974-2	MW-2	Total/NA	Water	8015B NM	64706
MB 860-64706/1-A	Method Blank	Total/NA	Water	8015B NM	64706
LCS 860-64706/2-A	Lab Control Sample	Total/NA	Water	8015B NM	64706
LCSD 860-64706/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	64706

Analysis Batch: 64807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	8015 NM	
880-17974-2	MW-2	Total/NA	Water	8015 NM	

HPLC/IC

Analysis Batch: 64595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	300.0	
880-17974-2	MW-2	Total/NA	Water	300.0	
MB 860-64595/3	Method Blank	Total/NA	Water	300.0	
MB 860-64595/44	Method Blank	Total/NA	Water	300.0	
LCS 860-64595/46	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-64595/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-64595/47	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-64595/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-64595/5	Lab Control Sample	Total/NA	Water	300.0	
880-17974-1 MS	MW-1	Total/NA	Water	300.0	
880-17974-1 MSD	MW-1	Total/NA	Water	300.0	

Analysis Batch: 64596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	300.0	
880-17974-2	MW-2	Total/NA	Water	300.0	
MB 860-64596/3	Method Blank	Total/NA	Water	300.0	
MB 860-64596/44	Method Blank	Total/NA	Water	300.0	

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QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-17974-1

HPLC/IC (Continued)

Analysis Batch: 64596 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-64596/46	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-64596/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-64596/47	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-64596/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-64596/13	Lab Control Sample	Total/NA	Water	300.0	
880-17974-1 MS	MW-1	Total/NA	Water	300.0	
880-17974-1 MSD	MW-1	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 64785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	SM 2320B	
880-17974-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-64785/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-64785/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-64785/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 64799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-17974-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 65309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-17974-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-65309/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-65309/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-65309/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-17974-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-17974-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 66277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17974-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-17974-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Lab Chronicle

Client: Ensolum

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-17974-1

Date Collected: 08/10/22 11:15

Matrix: Water

Date Received: 08/10/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	64470	TTD	EET HOU	08/11/22 17:25
Total/NA	Analysis	8015 NM		1	64807	MC	EET HOU	08/12/22 17:04
Total/NA	Prep	8015NM Aq Prep			64706	SYH	EET HOU	08/12/22 10:23
Total/NA	Analysis	8015B NM		1	64711	SAR	EET HOU	08/12/22 12:15
Total/NA	Analysis	300.0		1	64595	RBNS	EET HOU	08/12/22 04:06
Total/NA	Analysis	300.0		1	64596	RBNS	EET HOU	08/12/22 04:06
Total/NA	Analysis	SM 2320B		1	64785	TL	EET HOU	08/12/22 12:16
Total/NA	Analysis	SM 4500 CO2 D		1	66277	AA	EET HOU	08/23/22 18:04
Total/NA	Analysis	SM 4500 H+ B		1	64799	TL	EET HOU	08/12/22 16:09
Total/NA	Analysis	SM 4500 S2 F		1	65309	YGG	EET HOU	08/16/22 22:36

Client Sample ID: MW-2

Lab Sample ID: 880-17974-2

Date Collected: 08/10/22 13:20

Matrix: Water

Date Received: 08/10/22 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	64470	TTD	EET HOU	08/11/22 17:46
Total/NA	Analysis	8260C		5	64470	TTD	EET HOU	08/11/22 18:06
Total/NA	Analysis	8015 NM		1	64807	MC	EET HOU	08/12/22 17:04
Total/NA	Prep	8015NM Aq Prep			64706	SYH	EET HOU	08/12/22 10:23
Total/NA	Analysis	8015B NM		1	64711	SAR	EET HOU	08/12/22 12:34
Total/NA	Analysis	300.0		1	64595	RBNS	EET HOU	08/12/22 07:20
Total/NA	Analysis	300.0		1	64596	RBNS	EET HOU	08/12/22 07:20
Total/NA	Analysis	SM 2320B		1	64785	TL	EET HOU	08/12/22 12:32
Total/NA	Analysis	SM 4500 CO2 D		1	66277	AA	EET HOU	08/23/22 18:04
Total/NA	Analysis	SM 4500 H+ B		1	64799	TL	EET HOU	08/12/22 16:05
Total/NA	Analysis	SM 4500 S2 F		1	65309	YGG	EET HOU	08/16/22 22:36

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: 880-17974-1

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

Job ID: 880-17974-1

Project/Site: South Hobbs - 03B1417002

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: 880-17974-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17974-1	MW-1	Water	08/10/22 11:15	08/10/22 16:25
880-17974-2	MW-2	Water	08/10/22 13:20	08/10/22 16:25

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Chain of Custody

Work Order No:

17972

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 508-3333
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
(578-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813)

www.xenco.com Page 1 of 1

Project Manager:	Beaux Jennings	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	601 Marienfeld #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 ☐ RCC ☐ Superfund ☐

State of Project:

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADAPT ☐ Other ☐

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

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Loc:	Yes	No
Temperature (°C):	3.5/3.5				Thermometer ID#		
Received Intact:	(Yes) No				Correction Factor:	1.2	
Cooler Custody Seals:	(Seal) No N/A				Total Containers:		

Number of Containers	
Red Carbon Dioxide 4500 CO2 c	
Red Sulfide SW-846 #376.2	
Y-846 #8260	
A Method #8015	
EPA Method #846 300	
SW-846 Method 150.1	

ANALYSIS REQUEST

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

[illegible]

	✓	✓	Number
	X	X	Dissolve
	X	X	Dissove
	X	X	VOC SW
	X	X	TPH EPA
	X	X	Chloride
	X	X	pH EPA

[illegible][illegible]

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
1 		2/10/22	2		
3 			4		
5		10/25	6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-17974-1

Login Number: 17974

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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?	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: 880-17974-1

Login Number: 17974

List Number: 2

Creator: Milone, Jeancarlo

List Source: Eurofins Houston

List Creation: 08/11/22 03:24 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
America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-18321-1

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

Authorized for release by:

8/24/2022 2:31:45 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

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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: Levey Well Hobbs, NM - 03B1417001

Laboratory Job ID: 880-18321-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-18321-1
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
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
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.
E	Result exceeded calibration range.
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)

Definitions/Glossary

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

Job ID: 880-18321-1
SDG: Hobbs NM

Glossary (Continued)

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

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Case Narrative

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

Job ID: 880-18321-1
SDG: Hobbs NM

Job ID: 880-18321-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-18321-1

Receipt

The sample was received on 8/18/2022 2:48 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 3.4°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

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

Metals

Method 200.7: The method blank for preparation batch 860-66021 and analytical batch 860-66258 contained Potassium 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 200.7: Due to the high concentration of Calcium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-66021 and analytical batch 860-66258 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) 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: 880-18321-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-18321-1

Date Collected: 08/18/22 10:10

Matrix: Water

Date Received: 08/18/22 14:48

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00304		0.00100	0.000533	mg/L		08/19/22 15:36	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		08/19/22 15:36	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		08/19/22 15:36	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		08/19/22 15:36	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		08/19/22 15:36	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		08/19/22 15:36	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		08/19/22 15:36	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		08/19/22 15:36	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		08/19/22 15:36	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		08/19/22 15:36	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		08/19/22 15:36	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		08/19/22 15:36	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		08/19/22 15:36	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		08/19/22 15:36	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		08/19/22 15:36	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		08/19/22 15:36	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		08/19/22 15:36	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		08/19/22 15:36	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		08/19/22 15:36	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		08/19/22 15:36	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/19/22 15:36	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/19/22 15:36	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		08/19/22 15:36	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		08/19/22 15:36	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L		08/19/22 15:36	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L		08/19/22 15:36	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L		08/19/22 15:36	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L		08/19/22 15:36	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L		08/19/22 15:36	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L		08/19/22 15:36	1
Ethylbenzene	0.0124		0.00100	0.000411	mg/L		08/19/22 15:36	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L		08/19/22 15:36	1
Isopropylbenzene	0.00589		0.00100	0.000613	mg/L		08/19/22 15:36	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L		08/19/22 15:36	1
m,p-Xylenes	0.0495		0.0100	0.00124	mg/L		08/19/22 15:36	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L		08/19/22 15:36	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L		08/19/22 15:36	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644	mg/L		08/19/22 15:36	1
N-Propylbenzene	0.00280		0.00100	0.000498	mg/L		08/19/22 15:36	1
o-Xylene	0.00795		0.00100	0.000551	mg/L		08/19/22 15:36	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919	mg/L		08/19/22 15:36	1
sec-Butylbenzene	0.00104		0.00100	0.000468	mg/L		08/19/22 15:36	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L		08/19/22 15:36	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L		08/19/22 15:36	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L		08/19/22 15:36	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L		08/19/22 15:36	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L		08/19/22 15:36	1
Toluene	0.0261		0.00100	0.000475	mg/L		08/19/22 15:36	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L		08/19/22 15:36	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-18321-1

Date Collected: 08/18/22 10:10

Matrix: Water

Date Received: 08/18/22 14:48

Method: 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			08/19/22 15:36	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/19/22 15:36	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/19/22 15:36	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/19/22 15:36	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/19/22 15:36	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/19/22 15:36	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/19/22 15:36	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/19/22 15:36	1
1,2,4-Trimethylbenzene	0.0131		0.00100	0.000417 mg/L			08/19/22 15:36	1
1,3,5-Trimethylbenzene	0.00410		0.00100	0.000456 mg/L			08/19/22 15:36	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/19/22 15:36	1
Xylenes, Total	0.0575		0.0100	0.00124 mg/L			08/19/22 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		08/19/22 15:36	1
Dibromofluoromethane (Surr)	91		75 - 131		08/19/22 15:36	1
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		08/19/22 15:36	1
Toluene-d8 (Surr)	102		80 - 117		08/19/22 15:36	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.473	J	0.500	0.0711 mg/L			08/20/22 02:57	1
Nitrate as N	0.157		0.100	0.0391 mg/L			08/20/22 02:57	1
Chloride	213		0.500	0.200 mg/L			08/20/22 02:57	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/20/22 02:57	1
Fluoride	0.552		0.500	0.100 mg/L			08/20/22 02:57	1
Sulfate	45.4		0.500	0.109 mg/L			08/20/22 02:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	261		10.0	5.76 mg/L		08/22/22 10:45	08/23/22 12:28	50
Magnesium	52.0		0.200	0.0428 mg/L		08/22/22 10:45	08/23/22 12:10	1
Potassium	4.22	B	0.500	0.0914 mg/L		08/22/22 10:45	08/23/22 12:10	1
Sodium	80.6		0.500	0.152 mg/L		08/22/22 10:45	08/23/22 12:10	1
SiO2	71.0		1.07	0.471 mg/L		08/22/22 10:45	08/23/22 12:10	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	0.748			%			08/24/22 13:51	1
Alkalinity	563		4.00	4.00 mg/L			08/22/22 13:51	1
Bicarbonate Alkalinity as CaCO3	563		4.00	4.00 mg/L			08/22/22 13:51	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/22/22 13:51	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/22/22 13:51	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			08/22/22 13:51	1
Total Dissolved Solids	1370		10.0	10.0 mg/L			08/19/22 15:04	1
pH	6.5	HF		SU			08/22/22 14:36	1
Temperature	20.2	HF		Degrees C			08/22/22 14:36	1

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Surrogate Summary

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

Job ID: 880-18321-1
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)
860-31551-C-4 MS	Matrix Spike	99	101	97	96
860-31551-C-4 MSD	Matrix Spike Duplicate	101	98	95	95
880-18321-1	Levey Well	101	91	101	102
LCS 860-65717/3	Lab Control Sample	101	100	97	98
LCSD 860-65717/4	Lab Control Sample Dup	99	100	95	94
MB 860-65717/10	Method Blank	100	100	98	96
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: 880-18321-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-65717/10

Matrix: Water

Analysis Batch: 65717

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			08/19/22 11:51	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/19/22 11:51	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/19/22 11:51	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/19/22 11:51	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/19/22 11:51	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/19/22 11:51	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/19/22 11:51	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/19/22 11:51	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/19/22 11:51	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/19/22 11:51	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/19/22 11:51	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/19/22 11:51	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/19/22 11:51	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/19/22 11:51	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/19/22 11:51	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/19/22 11:51	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/19/22 11:51	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/19/22 11:51	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/19/22 11:51	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/19/22 11:51	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/19/22 11:51	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/19/22 11:51	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/19/22 11:51	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/19/22 11:51	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/19/22 11:51	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/19/22 11:51	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/19/22 11:51	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/19/22 11:51	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/19/22 11:51	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/19/22 11:51	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/19/22 11:51	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/19/22 11:51	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/19/22 11:51	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/19/22 11:51	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/19/22 11:51	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/19/22 11:51	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/19/22 11:51	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/19/22 11:51	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/19/22 11:51	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/19/22 11:51	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/19/22 11:51	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/19/22 11:51	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/19/22 11:51	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/19/22 11:51	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/19/22 11:51	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/19/22 11:51	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/19/22 11:51	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/19/22 11:51	1

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QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-65717/10

Matrix: Water

Analysis Batch: 65717

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			08/19/22 11:51	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/19/22 11:51	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/19/22 11:51	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/19/22 11:51	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/19/22 11:51	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/19/22 11:51	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/19/22 11:51	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/19/22 11:51	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/19/22 11:51	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/19/22 11:51	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/19/22 11:51	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/19/22 11:51	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/19/22 11:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		08/19/22 11:51	1
Dibromofluoromethane (Surr)	100		75 - 131		08/19/22 11:51	1
1,2-Dichloroethane-d4 (Surr)	98		63 - 144		08/19/22 11:51	1
Toluene-d8 (Surr)	96		80 - 117		08/19/22 11:51	1

Lab Sample ID: LCS 860-65717/3

Matrix: Water

Analysis Batch: 65717

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	0.04855		mg/L		97	66 - 142
Bromobenzene	0.0500	0.04723		mg/L		94	75 - 125
Bromochloromethane	0.0500	0.04876		mg/L		98	60 - 140
Bromodichloromethane	0.0500	0.04833		mg/L		97	75 - 125
Bromoform	0.0500	0.04779		mg/L		96	75 - 125
Bromomethane	0.0500	0.04320		mg/L		86	60 - 140
2-Butanone	0.250	0.2397		mg/L		96	60 - 140
Carbon tetrachloride	0.0500	0.04231		mg/L		85	62 - 125
Chlorobenzene	0.0500	0.04548		mg/L		91	60 - 133
Chloroethane	0.0500	0.05542		mg/L		111	60 - 140
Chloroform	0.0500	0.04885		mg/L		98	70 - 130
Chloromethane	0.0500	0.05115		mg/L		102	60 - 140
2-Chlorotoluene	0.0500	0.04630		mg/L		93	73 - 125
4-Chlorotoluene	0.0500	0.04534		mg/L		91	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04788		mg/L		96	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04961		mg/L		99	74 - 125
Dibromochloromethane	0.0500	0.04837		mg/L		97	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04918		mg/L		98	59 - 125
1,2-Dibromoethane	0.0500	0.04710		mg/L		94	73 - 125
1,2-Dichlorobenzene	0.0500	0.04571		mg/L		91	75 - 125
1,3-Dichlorobenzene	0.0500	0.04675		mg/L		93	75 - 125
1,4-Dichlorobenzene	0.0500	0.04474		mg/L		89	75 - 125
Dichlorodifluoromethane	0.0500	0.05750		mg/L		115	70 - 130

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QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-65717/3

Matrix: Water

Analysis Batch: 65717

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	0.04708		mg/L		94	72 - 125
1,2-Dichloroethane	0.0500	0.04702		mg/L		94	68 - 127
1,1-Dichloroethene	0.0500	0.05094		mg/L		102	59 - 172
1,2-Dichloropropane	0.0500	0.04842		mg/L		97	74 - 125
1,3-Dichloropropane	0.0500	0.04516		mg/L		90	75 - 125
2,2-Dichloropropane	0.0500	0.05019		mg/L		100	75 - 125
1,1-Dichloropropene	0.0500	0.04921		mg/L		98	75 - 125
Ethylbenzene	0.0500	0.04531		mg/L		91	75 - 125
Hexachlorobutadiene	0.0500	0.05016		mg/L		100	75 - 125
Isopropylbenzene	0.0500	0.04510		mg/L		90	75 - 125
Methylene Chloride	0.0500	0.05142		mg/L		103	75 - 125
m,p-Xylenes	0.0500	0.04559		mg/L		91	75 - 125
MTBE	0.0500	0.04896		mg/L		98	65 - 135
Naphthalene	0.0500	0.04929		mg/L		99	70 - 130
n-Butylbenzene	0.0500	0.04639		mg/L		93	75 - 125
N-Propylbenzene	0.0500	0.04603		mg/L		92	75 - 125
o-Xylene	0.0500	0.04534		mg/L		91	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.04713		mg/L		94	75 - 125
sec-Butylbenzene	0.0500	0.04661		mg/L		93	75 - 125
Styrene	0.0500	0.04503		mg/L		90	75 - 125
tert-Butylbenzene	0.0500	0.04604		mg/L		92	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04555		mg/L		91	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04638		mg/L		93	74 - 125
Tetrachloroethene	0.0500	0.04659		mg/L		93	71 - 125
Toluene	0.0500	0.04551		mg/L		91	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04814		mg/L		96	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04803		mg/L		96	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04667		mg/L		93	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04745		mg/L		95	75 - 135
1,1,1-Trichloroethane	0.0500	0.04880		mg/L		98	75 - 125
1,1,2-Trichloroethane	0.0500	0.04854		mg/L		97	75 - 127
Trichloroethene	0.0500	0.04800		mg/L		96	62 - 137
Trichlorofluoromethane	0.0500	0.05449		mg/L		109	60 - 140
1,2,3-Trichloropropane	0.0500	0.04459		mg/L		89	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04698		mg/L		94	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04681		mg/L		94	60 - 140
Vinyl chloride	0.0500	0.05151		mg/L		103	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	97		63 - 144
Toluene-d8 (Surr)	98		80 - 117

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QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-65717/4

Matrix: Water

Analysis Batch: 65717

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	0.04753		mg/L		95	66 - 142	2	25
Bromobenzene	0.0500	0.04520		mg/L		90	75 - 125	4	25
Bromochloromethane	0.0500	0.05016		mg/L		100	60 - 140	3	25
Bromodichloromethane	0.0500	0.04932		mg/L		99	75 - 125	2	25
Bromoform	0.0500	0.05012		mg/L		100	75 - 125	5	25
Bromomethane	0.0500	0.04359		mg/L		87	60 - 140	1	25
2-Butanone	0.250	0.2576		mg/L		103	60 - 140	7	25
Carbon tetrachloride	0.0500	0.04106		mg/L		82	62 - 125	3	25
Chlorobenzene	0.0500	0.04524		mg/L		90	60 - 133	1	25
Chloroethane	0.0500	0.05471		mg/L		109	60 - 140	1	25
Chloroform	0.0500	0.04924		mg/L		98	70 - 130	1	25
Chloromethane	0.0500	0.05142		mg/L		103	60 - 140	1	25
2-Chlorotoluene	0.0500	0.03899		mg/L		78	73 - 125	17	25
4-Chlorotoluene	0.0500	0.04279		mg/L		86	74 - 125	6	25
cis-1,2-Dichloroethene	0.0500	0.04898		mg/L		98	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.04955		mg/L		99	74 - 125	0	25
Dibromochloromethane	0.0500	0.05073		mg/L		101	73 - 125	5	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05003		mg/L		100	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.04879		mg/L		98	73 - 125	4	25
1,2-Dichlorobenzene	0.0500	0.04392		mg/L		88	75 - 125	4	25
1,3-Dichlorobenzene	0.0500	0.04391		mg/L		88	75 - 125	6	25
1,4-Dichlorobenzene	0.0500	0.04363		mg/L		87	75 - 125	3	25
Dichlorodifluoromethane	0.0500	0.05478		mg/L		110	70 - 130	5	25
1,1-Dichloroethane	0.0500	0.04817		mg/L		96	72 - 125	2	25
1,2-Dichloroethane	0.0500	0.04823		mg/L		96	68 - 127	3	25
1,1-Dichloroethene	0.0500	0.05100		mg/L		102	59 - 172	0	25
1,2-Dichloropropane	0.0500	0.04807		mg/L		96	74 - 125	1	25
1,3-Dichloropropane	0.0500	0.04589		mg/L		92	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.04977		mg/L		100	75 - 125	1	25
1,1-Dichloropropene	0.0500	0.04819		mg/L		96	75 - 125	2	25
Ethylbenzene	0.0500	0.04474		mg/L		89	75 - 125	1	25
Hexachlorobutadiene	0.0500	0.04912		mg/L		98	75 - 125	2	25
Isopropylbenzene	0.0500	0.04480		mg/L		90	75 - 125	1	25
Methylene Chloride	0.0500	0.05131		mg/L		103	75 - 125	0	25
m,p-Xylenes	0.0500	0.04564		mg/L		91	75 - 125	0	25
MTBE	0.0500	0.05192		mg/L		104	65 - 135	6	25
Naphthalene	0.0500	0.05206		mg/L		104	70 - 130	5	25
n-Butylbenzene	0.0500	0.04438		mg/L		89	75 - 125	4	25
N-Propylbenzene	0.0500	0.04234		mg/L		85	75 - 125	8	25
o-Xylene	0.0500	0.04498		mg/L		90	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04405		mg/L		88	75 - 125	7	25
sec-Butylbenzene	0.0500	0.04345		mg/L		87	75 - 125	7	25
Styrene	0.0500	0.04475		mg/L		89	75 - 125	1	25
tert-Butylbenzene	0.0500	0.04352		mg/L		87	75 - 125	6	25
1,1,1,2-Tetrachloroethane	0.0500	0.04687		mg/L		94	72 - 125	3	25
1,1,2,2-Tetrachloroethane	0.0500	0.04717		mg/L		94	74 - 125	2	25
Tetrachloroethene	0.0500	0.04406		mg/L		88	71 - 125	6	25
Toluene	0.0500	0.04496		mg/L		90	59 - 139	1	25

Eurofins Midland

QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-65717/4

Matrix: Water

Analysis Batch: 65717

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	0.04920		mg/L		98	75 - 125	2	25
trans-1,3-Dichloropropene	0.0500	0.04852		mg/L		97	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.04829		mg/L		97	75 - 137	3	25
1,2,4-Trichlorobenzene	0.0500	0.04780		mg/L		96	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.04842		mg/L		97	75 - 125	1	25
1,1,2-Trichloroethane	0.0500	0.04989		mg/L		100	75 - 127	3	25
Trichloroethene	0.0500	0.04767		mg/L		95	62 - 137	1	25
Trichlorofluoromethane	0.0500	0.05272		mg/L		105	60 - 140	3	25
1,2,3-Trichloropropane	0.0500	0.04607		mg/L		92	75 - 125	3	25
1,2,4-Trimethylbenzene	0.0500	0.04474		mg/L		89	75 - 125	5	25
1,3,5-Trimethylbenzene	0.0500	0.04387		mg/L		88	60 - 140	6	25
Vinyl chloride	0.0500	0.05064		mg/L		101	60 - 140	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	95		63 - 144
Toluene-d8 (Surr)	94		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-65810/3

Matrix: Water

Analysis Batch: 65810

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			08/19/22 14:43	1
Chloride	<0.200	U	0.500	0.200 mg/L			08/19/22 14:43	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/19/22 14:43	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/19/22 14:43	1

Lab Sample ID: MB 860-65810/47

Matrix: Water

Analysis Batch: 65810

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			08/20/22 01:06	1
Chloride	<0.200	U	0.500	0.200 mg/L			08/20/22 01:06	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/20/22 01:06	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/20/22 01:06	1

Lab Sample ID: LCS 860-65810/48

Matrix: Water

Analysis Batch: 65810

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	10.31		mg/L		103	90 - 110
Chloride	10.0	9.721		mg/L		97	90 - 110
Fluoride	10.0	10.48		mg/L		105	90 - 110

Eurofins Midland

QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-65810/48

Matrix: Water

Analysis Batch: 65810

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	9.814		mg/L		98	90 - 110

Lab Sample ID: LCSD 860-65810/49

Matrix: Water

Analysis Batch: 65810

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	10.35		mg/L		104	90 - 110	0	20
Chloride	10.0	9.735		mg/L		97	90 - 110	0	20
Fluoride	10.0	10.50		mg/L		105	90 - 110	0	20
Sulfate	10.0	9.809		mg/L		98	90 - 110	0	20

Lab Sample ID: LLCS 860-65810/5

Matrix: Water

Analysis Batch: 65810

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	0.5633		mg/L		113	50 - 150
Chloride	0.500	0.5497		mg/L		110	50 - 150
Fluoride	0.500	0.4386	J	mg/L		88	50 - 150
Sulfate	0.500	0.5687		mg/L		114	50 - 150

Lab Sample ID: MB 860-65811/3

Matrix: Water

Analysis Batch: 65811

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		08/19/22 14:43	1
Nitrite as N	<0.0293	U	0.100	0.0293	mg/L		08/19/22 14:43	1

Lab Sample ID: MB 860-65811/47

Matrix: Water

Analysis Batch: 65811

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		08/20/22 01:06	1
Nitrite as N	<0.0293	U	0.100	0.0293	mg/L		08/20/22 01:06	1

Lab Sample ID: LCS 860-65811/48

Matrix: Water

Analysis Batch: 65811

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	9.919		mg/L		99	80 - 120
Nitrite as N	5.00	5.171		mg/L		103	80 - 120

Eurofins Midland

QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-65811/49

Matrix: Water

Analysis Batch: 65811

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	9.938		mg/L		99	80 - 120	0	20
Nitrite as N	5.00	5.190		mg/L		104	80 - 120	0	20

Lab Sample ID: LLCS 860-65811/4

Matrix: Water

Analysis Batch: 65811

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	0.1160		mg/L		116	50 - 150
Nitrite as N	0.100	0.1090		mg/L		109	50 - 150

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-66021/1-A

Matrix: Water

Analysis Batch: 66258

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 66021

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		08/22/22 10:45	08/23/22 11:59	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		08/22/22 10:45	08/23/22 11:59	1
Potassium	0.09768	J	0.500	0.0914 mg/L		08/22/22 10:45	08/23/22 11:59	1
Sodium	<0.152	U	0.500	0.152 mg/L		08/22/22 10:45	08/23/22 11:59	1
SiO2	<0.471	U	1.07	0.471 mg/L		08/22/22 10:45	08/23/22 11:59	1

Lab Sample ID: LCS 860-66021/2-A

Matrix: Water

Analysis Batch: 66258

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 66021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	25.27		mg/L		101	85 - 115
Magnesium	25.0	24.92		mg/L		100	85 - 115
Potassium	10.0	10.30		mg/L		103	85 - 115
Sodium	25.0	25.42		mg/L		102	85 - 115
SiO2	21.4	22.76		mg/L		106	85 - 115

Lab Sample ID: LCSD 860-66021/3-A

Matrix: Water

Analysis Batch: 66258

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 66021

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	25.35		mg/L		101	85 - 115	0	20
Magnesium	25.0	25.05		mg/L		100	85 - 115	1	20
Potassium	10.0	10.36		mg/L		104	85 - 115	1	20
Sodium	25.0	25.54		mg/L		102	85 - 115	0	20
SiO2	21.4	22.82		mg/L		107	85 - 115	0	20

Eurofins Midland

QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

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

Lab Sample ID: LLCS 860-66021/4-A

Matrix: Water

Analysis Batch: 66258

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 66021

Analyte	Spike	LLCS	LLCS	Unit	D	%Rec	%Rec	%Rec
	Added	Result	Qualifier				Limits	
Calcium	0.200	0.2287		mg/L		114	50 - 150	
Magnesium	0.200	0.1922	J	mg/L		96	50 - 150	
Potassium	0.500	0.5581		mg/L		112	50 - 150	
Sodium	0.500	0.4504	J	mg/L		90	50 - 150	
SiO2	1.07	1.047	J	mg/L		98	50 - 150	

Lab Sample ID: 880-18321-1 MS

Matrix: Water

Analysis Batch: 66258

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 66021

Analyte	Sample		Spike	MS		Unit	D	%Rec	%Rec	
	Result	Qualifier		Result	Qualifier				Limits	
Calcium	259	E	25.0	274.2	E 4	mg/L		62	70 - 130	
Magnesium	52.0		25.0	74.88		mg/L		92	70 - 130	
Potassium	4.22	B	10.0	14.77		mg/L		106	70 - 130	
Sodium	80.6		25.0	103.3		mg/L		91	70 - 130	
SiO2	71.0		21.4	91.70		mg/L		97	70 - 130	

Lab Sample ID: 880-18321-1 MSD

Matrix: Water

Analysis Batch: 66258

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 66021

Analyte	Sample		Spike	MSD		Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier		Result	Qualifier				Limits		RPD	Limit
Calcium	259	E	25.0	274.1	E 4	mg/L		62	70 - 130		0	20
Magnesium	52.0		25.0	74.80		mg/L		91	70 - 130		0	20
Potassium	4.22	B	10.0	14.80		mg/L		106	70 - 130		0	20
Sodium	80.6		25.0	103.4		mg/L		91	70 - 130		0	20
SiO2	71.0		21.4	91.37		mg/L		95	70 - 130		0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-66106/4

Matrix: Water

Analysis Batch: 66106

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Alkalinity	<4.00	U	4.00	4.00 mg/L			08/22/22 12:21	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/22/22 12:21	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/22/22 12:21	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/22/22 12:21	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			08/22/22 12:21	1

Lab Sample ID: LCS 860-66106/5

Matrix: Water

Analysis Batch: 66106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits
Alkalinity	250	249.3		mg/L		100	85 - 115

Eurofins Midland

QC Sample Results

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

Job ID: 880-18321-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-66106/6
Matrix: Water
Analysis Batch: 66106

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	253.2		mg/L		101	85 - 115	2	20

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

Lab Sample ID: MB 860-65843/1
Matrix: Water
Analysis Batch: 65843

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			08/19/22 15:04	1

Lab Sample ID: LCS 860-65843/2
Matrix: Water
Analysis Batch: 65843

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	982.0		mg/L		98	80 - 120

Lab Sample ID: LCSD 860-65843/3
Matrix: Water
Analysis Batch: 65843

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	1057		mg/L		106	80 - 120	7	10

QC Association Summary

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

Job ID: 880-18321-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 65717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total/NA	Water	8260C	
MB 860-65717/10	Method Blank	Total/NA	Water	8260C	
LCS 860-65717/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-65717/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 65810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total/NA	Water	300.0	
MB 860-65810/3	Method Blank	Total/NA	Water	300.0	
MB 860-65810/47	Method Blank	Total/NA	Water	300.0	
LCS 860-65810/48	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-65810/49	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-65810/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 65811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total/NA	Water	300.0	
MB 860-65811/3	Method Blank	Total/NA	Water	300.0	
MB 860-65811/47	Method Blank	Total/NA	Water	300.0	
LCS 860-65811/48	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-65811/49	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-65811/4	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 66021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-66021/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-66021/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-66021/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-66021/4-A	Lab Control Sample	Total Recoverable	Water	200.7	
880-18321-1 MS	Levey Well	Total Recoverable	Water	200.7	
880-18321-1 MSD	Levey Well	Total Recoverable	Water	200.7	

Analysis Batch: 66258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66021
880-18321-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66021
MB 860-66021/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	66021
LCS 860-66021/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	66021
LCSD 860-66021/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	66021
LLCS 860-66021/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	66021
880-18321-1 MS	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66021
880-18321-1 MSD	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66021

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QC Association Summary

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

Job ID: 880-18321-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 65843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-65843/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-65843/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-65843/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 66063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 66106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-66106/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-66106/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-66106/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 66403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18321-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-18321-1
SDG: Hobbs NM

Client Sample ID: Levey Well
Date Collected: 08/18/22 10:10
Date Received: 08/18/22 14:48

Lab Sample ID: 880-18321-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	65717	NA	EET HOU	08/19/22 15:36
Total/NA	Analysis	300.0		1	65810	RBNS	EET HOU	08/20/22 02:57
Total/NA	Analysis	300.0		1	65811	A1S	EET HOU	08/20/22 02:57
Total Recoverable	Prep	200.7			66021	MD	EET HOU	08/22/22 10:45
Total Recoverable	Analysis	200.7 Rev 4.4		1	66258	DP	EET HOU	08/23/22 12:10
Total Recoverable	Prep	200.7			66021	MD	EET HOU	08/22/22 10:45
Total Recoverable	Analysis	200.7 Rev 4.4		50	66258	DP	EET HOU	08/23/22 12:28
Total/NA	Analysis	SM 1030E		1	66403	DP	EET HOU	08/24/22 13:51
Total/NA	Analysis	SM 2320B		1	66106	TL	EET HOU	08/22/22 13:51
Total/NA	Analysis	SM 2540C		1	65843	MCA	EET HOU	08/19/22 15:04
Total/NA	Analysis	SM 4500 H+ B		1	66063	TL	EET HOU	08/22/22 14:36

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: 880-18321-1
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

Job ID: 880-18321-1

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

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

Eurofins Midland

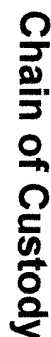
Sample Summary

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

Job ID: 880-18321-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-18321-1	Levey Well	Water	08/18/22 10:10	08/18/22 14:48

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Work Order No: 18321

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) 585-3443 Lubbock, TX (806) 794-1296
(575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-291-1111)

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

[illegible]

Order of Containers					
F, Cl, SO ₄ , B					
C, Ca, K, Mg, Na, Si					
y					
TAT starts the day received by the lab if received by 4:30pm					

[illegible]

880-18321 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

Circle Method(s) and Metal(s) to be analyzed

CLP / 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

Notices: 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
<i>[Signature]</i>	<i>[Signature]</i>	8/18/22			
		9:42			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-18321-1

SDG Number: Hobbs NM

Login Number: 18321

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: 880-18321-1

SDG Number: Hobbs NM

Login Number: 18321

List Number: 2

Creator: Bolch, Taylor

List Source: Eurofins Houston

List Creation: 08/19/22 12:33 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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-18320-1

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:

8/25/2022 11:56:40 AM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

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: 880-18320-1

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Definitions/Glossary

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

Job ID: 880-18320-1

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.
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

Case Narrative

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

Job ID: 880-18320-1

Job ID: 880-18320-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-18320-1

Receipt

The samples were received on 8/18/2022 2:48 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 3.4°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: 880-18320-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-18320-1

Date Collected: 08/18/22 11:00

Matrix: Water

Date Received: 08/18/22 14:48

Method: 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		08/19/22 14:35	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		08/19/22 14:35	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		08/19/22 14:35	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		08/19/22 14:35	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		08/19/22 14:35	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		08/19/22 14:35	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		08/19/22 14:35	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		08/19/22 14:35	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		08/19/22 14:35	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		08/19/22 14:35	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		08/19/22 14:35	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		08/19/22 14:35	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		08/19/22 14:35	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		08/19/22 14:35	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		08/19/22 14:35	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		08/19/22 14:35	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		08/19/22 14:35	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		08/19/22 14:35	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		08/19/22 14:35	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		08/19/22 14:35	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/19/22 14:35	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		08/19/22 14:35	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		08/19/22 14:35	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		08/19/22 14:35	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L		08/19/22 14:35	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L		08/19/22 14:35	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L		08/19/22 14:35	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L		08/19/22 14:35	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L		08/19/22 14:35	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L		08/19/22 14:35	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L		08/19/22 14:35	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L		08/19/22 14:35	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613	mg/L		08/19/22 14:35	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L		08/19/22 14:35	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124	mg/L		08/19/22 14:35	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L		08/19/22 14:35	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L		08/19/22 14:35	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644	mg/L		08/19/22 14:35	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498	mg/L		08/19/22 14:35	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L		08/19/22 14:35	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919	mg/L		08/19/22 14:35	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468	mg/L		08/19/22 14:35	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L		08/19/22 14:35	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L		08/19/22 14:35	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L		08/19/22 14:35	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L		08/19/22 14:35	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L		08/19/22 14:35	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L		08/19/22 14:35	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L		08/19/22 14:35	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-18320-1

Date Collected: 08/18/22 11:00

Matrix: Water

Date Received: 08/18/22 14:48

Method: 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			08/19/22 14:35	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/19/22 14:35	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/19/22 14:35	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/19/22 14:35	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/19/22 14:35	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/19/22 14:35	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/19/22 14:35	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/19/22 14:35	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/19/22 14:35	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/19/22 14:35	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/19/22 14:35	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/19/22 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		08/19/22 14:35	1
Dibromofluoromethane (Surr)	96		75 - 131		08/19/22 14:35	1
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		08/19/22 14:35	1
Toluene-d8 (Surr)	98		80 - 117		08/19/22 14:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<1.04	U	5.24	1.04 mg/L			08/22/22 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<1.04	U	5.24	1.04 mg/L		08/22/22 15:41	08/23/22 19:56	1
Diesel Range Organics (Over C10-C28)	<1.04	U	5.24	1.04 mg/L		08/22/22 15:41	08/23/22 19:56	1
Oil Range Organics (Over C28-C36)	<1.00	U	5.24	1.00 mg/L		08/22/22 15:41	08/23/22 19:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 135			08/22/22 15:41	08/23/22 19:56	1
o-Terphenyl	112		70 - 135			08/22/22 15:41	08/23/22 19:56	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.7		0.500	0.200 mg/L			08/20/22 02:15	1
Nitrate as N	0.0696	J	0.100	0.0391 mg/L			08/20/22 02:15	1
Fluoride	0.752		0.500	0.100 mg/L			08/20/22 02:15	1
Nitrite as N	0.154		0.100	0.0293 mg/L			08/20/22 02:15	1
Sulfate	39.4		0.500	0.109 mg/L			08/20/22 02:15	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	262		4.00	4.00 mg/L			08/22/22 13:24	1
Bicarbonate Alkalinity as CaCO3	262		4.00	4.00 mg/L			08/22/22 13:24	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/22/22 13:24	1
Carbon dioxide	283			mg/L			08/23/22 18:04	1
Carbon Dioxide, Free	52.4			mg/L			08/23/22 18:04	1
pH	7.0	HF		SU			08/22/22 14:33	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-18320-1

Date Collected: 08/18/22 11:00

Matrix: Water

Date Received: 08/18/22 14:48

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature	20.7	HF		Degrees C			08/22/22 14:33	1
Sulfide	<0.495	U	5.00	0.495 mg/L			08/25/22 00:46	1

Client Sample ID: MW-2

Lab Sample ID: 880-18320-2

Date Collected: 08/18/22 12:05

Matrix: Water

Date Received: 08/18/22 14:48

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0247		0.00100	0.000533 mg/L			08/19/22 14:55	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/19/22 14:55	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/19/22 14:55	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/19/22 14:55	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/19/22 14:55	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/19/22 14:55	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/19/22 14:55	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/19/22 14:55	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/19/22 14:55	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/19/22 14:55	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/19/22 14:55	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/19/22 14:55	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/19/22 14:55	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/19/22 14:55	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/19/22 14:55	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/19/22 14:55	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/19/22 14:55	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/19/22 14:55	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/19/22 14:55	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/19/22 14:55	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/19/22 14:55	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/19/22 14:55	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/19/22 14:55	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/19/22 14:55	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/19/22 14:55	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/19/22 14:55	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/19/22 14:55	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/19/22 14:55	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/19/22 14:55	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/19/22 14:55	1
Ethylbenzene	0.0277		0.00100	0.000411 mg/L			08/19/22 14:55	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/19/22 14:55	1
Isopropylbenzene	0.0115		0.00100	0.000613 mg/L			08/19/22 14:55	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/19/22 14:55	1
m,p-Xylenes	0.121		0.0100	0.00124 mg/L			08/19/22 14:55	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/19/22 14:55	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/19/22 14:55	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/19/22 14:55	1
N-Propylbenzene	0.00360		0.00100	0.000498 mg/L			08/19/22 14:55	1
o-Xylene	0.0110		0.00100	0.000551 mg/L			08/19/22 14:55	1
p-Cymene (p-Isopropyltoluene)	0.00101		0.00100	0.000919 mg/L			08/19/22 14:55	1

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Client Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-18320-2

Date Collected: 08/18/22 12:05

Matrix: Water

Date Received: 08/18/22 14:48

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.00118		0.00100	0.000468 mg/L			08/19/22 14:55	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/19/22 14:55	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/19/22 14:55	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/19/22 14:55	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/19/22 14:55	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/19/22 14:55	1
Toluene	0.00229		0.00100	0.000475 mg/L			08/19/22 14:55	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			08/19/22 14:55	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/19/22 14:55	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/19/22 14:55	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/19/22 14:55	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/19/22 14:55	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/19/22 14:55	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/19/22 14:55	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/19/22 14:55	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/19/22 14:55	1
1,2,4-Trimethylbenzene	0.0390		0.00100	0.000417 mg/L			08/19/22 14:55	1
1,3,5-Trimethylbenzene	0.0100		0.00100	0.000456 mg/L			08/19/22 14:55	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/19/22 14:55	1
Xylenes, Total	0.132		0.0100	0.00124 mg/L			08/19/22 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		08/19/22 14:55	1
4-Bromofluorobenzene (Surr)	102		74 - 124		08/19/22 15:16	5
Dibromofluoromethane (Surr)	98		75 - 131		08/19/22 14:55	1
Dibromofluoromethane (Surr)	92		75 - 131		08/19/22 15:16	5
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		08/19/22 14:55	1
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		08/19/22 15:16	5
Toluene-d8 (Surr)	96		80 - 117		08/19/22 14:55	1
Toluene-d8 (Surr)	100		80 - 117		08/19/22 15:16	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9.05		4.70	0.929 mg/L			08/22/22 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.43	J	4.70	0.929 mg/L		08/22/22 15:41	08/23/22 20:16	1
Diesel Range Organics (Over C10-C28)	7.62		4.70	0.929 mg/L		08/22/22 15:41	08/23/22 20:16	1
Oil Range Organics (Over C28-C36)	<0.897	U	4.70	0.897 mg/L		08/22/22 15:41	08/23/22 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 135	08/22/22 15:41	08/23/22 20:16	1
o-Terphenyl	73		70 - 135	08/22/22 15:41	08/23/22 20:16	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.1		0.500	0.200 mg/L			08/20/22 05:29	1
Nitrate as N	0.333		0.100	0.0391 mg/L			08/20/22 05:29	1

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Client Sample Results

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

Job ID: 880-18320-1

Client Sample ID: MW-2
Date Collected: 08/18/22 12:05
Date Received: 08/18/22 14:48

Lab Sample ID: 880-18320-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.122	J	0.500	0.100	mg/L			08/20/22 05:29	1
Nitrite as N	0.303		0.100	0.0293	mg/L			08/20/22 05:29	1
Sulfate	100		0.500	0.109	mg/L			08/20/22 05:29	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1280		4.00	4.00	mg/L			08/22/22 13:41	1
Bicarbonate Alkalinity as CaCO3	1280		4.00	4.00	mg/L			08/22/22 13:41	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			08/22/22 13:41	1
Carbon dioxide	2400				mg/L			08/23/22 18:04	1
Carbon Dioxide, Free	1280				mg/L			08/23/22 18:04	1
pH	6.3	HF			SU			08/22/22 14:34	1
Temperature	21.3	HF			Degrees C			08/22/22 14:34	1
Sulfide	<0.495	U	5.00	0.495	mg/L			08/25/22 00:46	1

Surrogate Summary

Client: Ensolum

Job ID: 880-18320-1

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)
860-31551-C-4 MS	Matrix Spike	99	101	97	96
860-31551-C-4 MSD	Matrix Spike Duplicate	101	98	95	95
880-18320-1	MW-1	102	96	101	98
880-18320-2	MW-2	100	98	103	96
880-18320-2	MW-2	102	92	101	100
LCS 860-65717/3	Lab Control Sample	101	100	97	98
LCSD 860-65717/4	Lab Control Sample Dup	99	100	95	94
MB 860-65717/10	Method Blank	100	100	98	96
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)
880-18320-1	MW-1	106	112
880-18320-2	MW-2	70	73
LCS 860-66074/2-A	Lab Control Sample	99	90
LCSD 860-66074/3-A	Lab Control Sample Dup	95	86
MB 860-66074/1-A	Method Blank	88	91
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-65717/10

Matrix: Water

Analysis Batch: 65717

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			08/19/22 11:51	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			08/19/22 11:51	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			08/19/22 11:51	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			08/19/22 11:51	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			08/19/22 11:51	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			08/19/22 11:51	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			08/19/22 11:51	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			08/19/22 11:51	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			08/19/22 11:51	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			08/19/22 11:51	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			08/19/22 11:51	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			08/19/22 11:51	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			08/19/22 11:51	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			08/19/22 11:51	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			08/19/22 11:51	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			08/19/22 11:51	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			08/19/22 11:51	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			08/19/22 11:51	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			08/19/22 11:51	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			08/19/22 11:51	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/19/22 11:51	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			08/19/22 11:51	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			08/19/22 11:51	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			08/19/22 11:51	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			08/19/22 11:51	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			08/19/22 11:51	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			08/19/22 11:51	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			08/19/22 11:51	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			08/19/22 11:51	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			08/19/22 11:51	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			08/19/22 11:51	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			08/19/22 11:51	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			08/19/22 11:51	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			08/19/22 11:51	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			08/19/22 11:51	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			08/19/22 11:51	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			08/19/22 11:51	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			08/19/22 11:51	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			08/19/22 11:51	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			08/19/22 11:51	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			08/19/22 11:51	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			08/19/22 11:51	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			08/19/22 11:51	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			08/19/22 11:51	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			08/19/22 11:51	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			08/19/22 11:51	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			08/19/22 11:51	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			08/19/22 11:51	1

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QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-65717/10

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 65717

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			08/19/22 11:51	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			08/19/22 11:51	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			08/19/22 11:51	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			08/19/22 11:51	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			08/19/22 11:51	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			08/19/22 11:51	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			08/19/22 11:51	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			08/19/22 11:51	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			08/19/22 11:51	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			08/19/22 11:51	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			08/19/22 11:51	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			08/19/22 11:51	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			08/19/22 11:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		08/19/22 11:51	1
Dibromofluoromethane (Surr)	100		75 - 131		08/19/22 11:51	1
1,2-Dichloroethane-d4 (Surr)	98		63 - 144		08/19/22 11:51	1
Toluene-d8 (Surr)	96		80 - 117		08/19/22 11:51	1

Lab Sample ID: LCS 860-65717/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 65717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04855		mg/L		97	66 - 142
Bromobenzene	0.0500	0.04723		mg/L		94	75 - 125
Bromochloromethane	0.0500	0.04876		mg/L		98	60 - 140
Bromodichloromethane	0.0500	0.04833		mg/L		97	75 - 125
Bromoform	0.0500	0.04779		mg/L		96	75 - 125
Bromomethane	0.0500	0.04320		mg/L		86	60 - 140
2-Butanone	0.250	0.2397		mg/L		96	60 - 140
Carbon tetrachloride	0.0500	0.04231		mg/L		85	62 - 125
Chlorobenzene	0.0500	0.04548		mg/L		91	60 - 133
Chloroethane	0.0500	0.05542		mg/L		111	60 - 140
Chloroform	0.0500	0.04885		mg/L		98	70 - 130
Chloromethane	0.0500	0.05115		mg/L		102	60 - 140
2-Chlorotoluene	0.0500	0.04630		mg/L		93	73 - 125
4-Chlorotoluene	0.0500	0.04534		mg/L		91	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04788		mg/L		96	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04961		mg/L		99	74 - 125
Dibromochloromethane	0.0500	0.04837		mg/L		97	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04918		mg/L		98	59 - 125
1,2-Dibromoethane	0.0500	0.04710		mg/L		94	73 - 125
1,2-Dichlorobenzene	0.0500	0.04571		mg/L		91	75 - 125
1,3-Dichlorobenzene	0.0500	0.04675		mg/L		93	75 - 125
1,4-Dichlorobenzene	0.0500	0.04474		mg/L		89	75 - 125
Dichlorodifluoromethane	0.0500	0.05750		mg/L		115	70 - 130

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QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-65717/3

Matrix: Water

Analysis Batch: 65717

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	0.04708		mg/L		94	72 - 125
1,2-Dichloroethane	0.0500	0.04702		mg/L		94	68 - 127
1,1-Dichloroethene	0.0500	0.05094		mg/L		102	59 - 172
1,2-Dichloropropane	0.0500	0.04842		mg/L		97	74 - 125
1,3-Dichloropropane	0.0500	0.04516		mg/L		90	75 - 125
2,2-Dichloropropane	0.0500	0.05019		mg/L		100	75 - 125
1,1-Dichloropropene	0.0500	0.04921		mg/L		98	75 - 125
Ethylbenzene	0.0500	0.04531		mg/L		91	75 - 125
Hexachlorobutadiene	0.0500	0.05016		mg/L		100	75 - 125
Isopropylbenzene	0.0500	0.04510		mg/L		90	75 - 125
Methylene Chloride	0.0500	0.05142		mg/L		103	75 - 125
m,p-Xylenes	0.0500	0.04559		mg/L		91	75 - 125
MTBE	0.0500	0.04896		mg/L		98	65 - 135
Naphthalene	0.0500	0.04929		mg/L		99	70 - 130
n-Butylbenzene	0.0500	0.04639		mg/L		93	75 - 125
N-Propylbenzene	0.0500	0.04603		mg/L		92	75 - 125
o-Xylene	0.0500	0.04534		mg/L		91	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.04713		mg/L		94	75 - 125
sec-Butylbenzene	0.0500	0.04661		mg/L		93	75 - 125
Styrene	0.0500	0.04503		mg/L		90	75 - 125
tert-Butylbenzene	0.0500	0.04604		mg/L		92	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04555		mg/L		91	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04638		mg/L		93	74 - 125
Tetrachloroethene	0.0500	0.04659		mg/L		93	71 - 125
Toluene	0.0500	0.04551		mg/L		91	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04814		mg/L		96	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04803		mg/L		96	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04667		mg/L		93	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04745		mg/L		95	75 - 135
1,1,1-Trichloroethane	0.0500	0.04880		mg/L		98	75 - 125
1,1,2-Trichloroethane	0.0500	0.04854		mg/L		97	75 - 127
Trichloroethene	0.0500	0.04800		mg/L		96	62 - 137
Trichlorofluoromethane	0.0500	0.05449		mg/L		109	60 - 140
1,2,3-Trichloropropane	0.0500	0.04459		mg/L		89	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04698		mg/L		94	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04681		mg/L		94	60 - 140
Vinyl chloride	0.0500	0.05151		mg/L		103	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	97		63 - 144
Toluene-d8 (Surr)	98		80 - 117

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-65717/4

Matrix: Water

Analysis Batch: 65717

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	0.04753		mg/L		95	66 - 142	2	25
Bromobenzene	0.0500	0.04520		mg/L		90	75 - 125	4	25
Bromochloromethane	0.0500	0.05016		mg/L		100	60 - 140	3	25
Bromodichloromethane	0.0500	0.04932		mg/L		99	75 - 125	2	25
Bromoform	0.0500	0.05012		mg/L		100	75 - 125	5	25
Bromomethane	0.0500	0.04359		mg/L		87	60 - 140	1	25
2-Butanone	0.250	0.2576		mg/L		103	60 - 140	7	25
Carbon tetrachloride	0.0500	0.04106		mg/L		82	62 - 125	3	25
Chlorobenzene	0.0500	0.04524		mg/L		90	60 - 133	1	25
Chloroethane	0.0500	0.05471		mg/L		109	60 - 140	1	25
Chloroform	0.0500	0.04924		mg/L		98	70 - 130	1	25
Chloromethane	0.0500	0.05142		mg/L		103	60 - 140	1	25
2-Chlorotoluene	0.0500	0.03899		mg/L		78	73 - 125	17	25
4-Chlorotoluene	0.0500	0.04279		mg/L		86	74 - 125	6	25
cis-1,2-Dichloroethene	0.0500	0.04898		mg/L		98	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.04955		mg/L		99	74 - 125	0	25
Dibromochloromethane	0.0500	0.05073		mg/L		101	73 - 125	5	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05003		mg/L		100	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.04879		mg/L		98	73 - 125	4	25
1,2-Dichlorobenzene	0.0500	0.04392		mg/L		88	75 - 125	4	25
1,3-Dichlorobenzene	0.0500	0.04391		mg/L		88	75 - 125	6	25
1,4-Dichlorobenzene	0.0500	0.04363		mg/L		87	75 - 125	3	25
Dichlorodifluoromethane	0.0500	0.05478		mg/L		110	70 - 130	5	25
1,1-Dichloroethane	0.0500	0.04817		mg/L		96	72 - 125	2	25
1,2-Dichloroethane	0.0500	0.04823		mg/L		96	68 - 127	3	25
1,1-Dichloroethene	0.0500	0.05100		mg/L		102	59 - 172	0	25
1,2-Dichloropropane	0.0500	0.04807		mg/L		96	74 - 125	1	25
1,3-Dichloropropane	0.0500	0.04589		mg/L		92	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.04977		mg/L		100	75 - 125	1	25
1,1-Dichloropropene	0.0500	0.04819		mg/L		96	75 - 125	2	25
Ethylbenzene	0.0500	0.04474		mg/L		89	75 - 125	1	25
Hexachlorobutadiene	0.0500	0.04912		mg/L		98	75 - 125	2	25
Isopropylbenzene	0.0500	0.04480		mg/L		90	75 - 125	1	25
Methylene Chloride	0.0500	0.05131		mg/L		103	75 - 125	0	25
m,p-Xylenes	0.0500	0.04564		mg/L		91	75 - 125	0	25
MTBE	0.0500	0.05192		mg/L		104	65 - 135	6	25
Naphthalene	0.0500	0.05206		mg/L		104	70 - 130	5	25
n-Butylbenzene	0.0500	0.04438		mg/L		89	75 - 125	4	25
N-Propylbenzene	0.0500	0.04234		mg/L		85	75 - 125	8	25
o-Xylene	0.0500	0.04498		mg/L		90	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04405		mg/L		88	75 - 125	7	25
sec-Butylbenzene	0.0500	0.04345		mg/L		87	75 - 125	7	25
Styrene	0.0500	0.04475		mg/L		89	75 - 125	1	25
tert-Butylbenzene	0.0500	0.04352		mg/L		87	75 - 125	6	25
1,1,1,2-Tetrachloroethane	0.0500	0.04687		mg/L		94	72 - 125	3	25
1,1,2,2-Tetrachloroethane	0.0500	0.04717		mg/L		94	74 - 125	2	25
Tetrachloroethene	0.0500	0.04406		mg/L		88	71 - 125	6	25
Toluene	0.0500	0.04496		mg/L		90	59 - 139	1	25

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QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-65717/4

Matrix: Water

Analysis Batch: 65717

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	0.04920		mg/L		98	75 - 125	2	25
trans-1,3-Dichloropropene	0.0500	0.04852		mg/L		97	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.04829		mg/L		97	75 - 137	3	25
1,2,4-Trichlorobenzene	0.0500	0.04780		mg/L		96	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.04842		mg/L		97	75 - 125	1	25
1,1,2-Trichloroethane	0.0500	0.04989		mg/L		100	75 - 127	3	25
Trichloroethene	0.0500	0.04767		mg/L		95	62 - 137	1	25
Trichlorofluoromethane	0.0500	0.05272		mg/L		105	60 - 140	3	25
1,2,3-Trichloropropane	0.0500	0.04607		mg/L		92	75 - 125	3	25
1,2,4-Trimethylbenzene	0.0500	0.04474		mg/L		89	75 - 125	5	25
1,3,5-Trimethylbenzene	0.0500	0.04387		mg/L		88	60 - 140	6	25
Vinyl chloride	0.0500	0.05064		mg/L		101	60 - 140	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	95		63 - 144
Toluene-d8 (Surr)	94		80 - 117

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

Lab Sample ID: MB 860-66074/1-A

Matrix: Water

Analysis Batch: 66200

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66074

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		08/22/22 15:41	08/23/22 19:37	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		08/22/22 15:41	08/23/22 19:37	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		08/22/22 15:41	08/23/22 19:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 135	08/22/22 15:41	08/23/22 19:37	1
o-Terphenyl	91		70 - 135	08/22/22 15:41	08/23/22 19:37	1

Lab Sample ID: LCS 860-66074/2-A

Matrix: Water

Analysis Batch: 66002

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.8	133.1		mg/L		133	70 - 135
Diesel Range Organics (Over C10-C28)	100	95.09		mg/L		95	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	99		70 - 135
o-Terphenyl	90		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-66074/3-A

Matrix: Water

Analysis Batch: 66002

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66074

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.8	133.3		mg/L		134	70 - 135	0	35
Diesel Range Organics (Over C10-C28)	100	97.37		mg/L		97	70 - 135	2	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	95		70 - 135						
o-Terphenyl	86		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-65810/3

Matrix: Water

Analysis Batch: 65810

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			08/19/22 14:43	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/19/22 14:43	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/19/22 14:43	1

Lab Sample ID: MB 860-65810/47

Matrix: Water

Analysis Batch: 65810

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			08/20/22 01:06	1
Fluoride	<0.100	U	0.500	0.100 mg/L			08/20/22 01:06	1
Sulfate	<0.109	U	0.500	0.109 mg/L			08/20/22 01:06	1

Lab Sample ID: LCS 860-65810/48

Matrix: Water

Analysis Batch: 65810

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	9.721		mg/L		97	90 - 110
Fluoride	10.0	10.48		mg/L		105	90 - 110
Sulfate	10.0	9.814		mg/L		98	90 - 110

Lab Sample ID: LCSD 860-65810/49

Matrix: Water

Analysis Batch: 65810

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	9.735		mg/L		97	90 - 110	0	20
Fluoride	10.0	10.50		mg/L		105	90 - 110	0	20
Sulfate	10.0	9.809		mg/L		98	90 - 110	0	20

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QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LLCS 860-65810/5

Matrix: Water

Analysis Batch: 65810

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	0.5497		mg/L		110	50 - 150
Fluoride	0.500	0.4386	J	mg/L		88	50 - 150
Sulfate	0.500	0.5687		mg/L		114	50 - 150

Lab Sample ID: 880-18320-1 MS

Matrix: Water

Analysis Batch: 65810

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
Chloride	77.7		10.0	86.12	4	mg/L		84	90 - 110
Fluoride	0.752		10.0	10.74		mg/L		100	90 - 110
Sulfate	39.4		10.0	48.44		mg/L		91	90 - 110

Lab Sample ID: 880-18320-1 MSD

Matrix: Water

Analysis Batch: 65810

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	RPD Limit
Chloride	77.7		10.0	86.24	4	mg/L		85	90 - 110	0	20
Fluoride	0.752		10.0	10.80		mg/L		100	90 - 110	1	20
Sulfate	39.4		10.0	48.49		mg/L		91	90 - 110	0	20

Lab Sample ID: MB 860-65811/3

Matrix: Water

Analysis Batch: 65811

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			08/19/22 14:43	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/19/22 14:43	1

Lab Sample ID: MB 860-65811/47

Matrix: Water

Analysis Batch: 65811

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			08/20/22 01:06	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			08/20/22 01:06	1

Lab Sample ID: LCS 860-65811/48

Matrix: Water

Analysis Batch: 65811

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	9.919		mg/L		99	80 - 120
Nitrite as N	5.00	5.171		mg/L		103	80 - 120

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QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-65811/49

Matrix: Water

Analysis Batch: 65811

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	9.938		mg/L		99	80 - 120	0	20
Nitrite as N	5.00	5.190		mg/L		104	80 - 120	0	20

Lab Sample ID: LLCS 860-65811/4

Matrix: Water

Analysis Batch: 65811

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.100	0.1160		mg/L		116	50 - 150		
Nitrite as N	0.100	0.1090		mg/L		109	50 - 150		

Lab Sample ID: 880-18320-1 MS

Matrix: Water

Analysis Batch: 65811

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	RPD	RPD Limit
Nitrate as N	0.0696	J	10.0	9.426		mg/L		94	80 - 120		
Nitrite as N	0.154		2.50	2.524		mg/L		95	80 - 120		

Lab Sample ID: 880-18320-1 MSD

Matrix: Water

Analysis Batch: 65811

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	RPD Limit
Nitrate as N	0.0696	J	10.0	9.418		mg/L		93	80 - 120	0	15
Nitrite as N	0.154		2.50	2.540		mg/L		95	80 - 120	1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-66106/4

Matrix: Water

Analysis Batch: 66106

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			08/22/22 12:21	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/22/22 12:21	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/22/22 12:21	1

Lab Sample ID: LCS 860-66106/5

Matrix: Water

Analysis Batch: 66106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	249.3		mg/L		100	85 - 115		

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QC Sample Results

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-66106/6

Matrix: Water

Analysis Batch: 66106

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	253.2		mg/L		101	85 - 115	2	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-66485/1

Matrix: Water

Analysis Batch: 66485

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			08/25/22 00:46	1

Lab Sample ID: LCS 860-66485/2

Matrix: Water

Analysis Batch: 66485

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	46.60		mg/L		93	80 - 120

Lab Sample ID: LCSD 860-66485/3

Matrix: Water

Analysis Batch: 66485

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	46.60		mg/L		93	80 - 120	0	20

Lab Sample ID: 880-18320-1 MS

Matrix: Water

Analysis Batch: 66485

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	45.80		mg/L		92	80 - 120

Lab Sample ID: 880-18320-1 MSD

Matrix: Water

Analysis Batch: 66485

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	RPD Limit
Sulfide	<0.495	U	50.0	45.80		mg/L		92	80 - 120	0	20

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 65717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	8260C	
880-18320-2	MW-2	Total/NA	Water	8260C	
880-18320-2	MW-2	Total/NA	Water	8260C	
MB 860-65717/10	Method Blank	Total/NA	Water	8260C	
LCS 860-65717/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-65717/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 64807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	8015 NM	
880-18320-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 66002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-66074/2-A	Lab Control Sample	Total/NA	Water	8015B NM	66074
LCSD 860-66074/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	66074

Prep Batch: 66074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-18320-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-66074/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-66074/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-66074/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 66200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	8015B NM	66074
880-18320-2	MW-2	Total/NA	Water	8015B NM	66074
MB 860-66074/1-A	Method Blank	Total/NA	Water	8015B NM	66074

HPLC/IC

Analysis Batch: 65810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	300.0	
880-18320-2	MW-2	Total/NA	Water	300.0	
MB 860-65810/3	Method Blank	Total/NA	Water	300.0	
MB 860-65810/47	Method Blank	Total/NA	Water	300.0	
LCS 860-65810/48	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-65810/49	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-65810/5	Lab Control Sample	Total/NA	Water	300.0	
880-18320-1 MS	MW-1	Total/NA	Water	300.0	
880-18320-1 MSD	MW-1	Total/NA	Water	300.0	

Analysis Batch: 65811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	300.0	
880-18320-2	MW-2	Total/NA	Water	300.0	
MB 860-65811/3	Method Blank	Total/NA	Water	300.0	

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

HPLC/IC (Continued)

Analysis Batch: 65811 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-65811/47	Method Blank	Total/NA	Water	300.0	
LCS 860-65811/48	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-65811/49	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-65811/4	Lab Control Sample	Total/NA	Water	300.0	
880-18320-1 MS	MW-1	Total/NA	Water	300.0	
880-18320-1 MSD	MW-1	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 66063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-18320-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 66106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	SM 2320B	
880-18320-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-66106/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-66106/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-66106/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 66277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-18320-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Analysis Batch: 66485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18320-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-18320-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-66485/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-66485/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-66485/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-18320-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-18320-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

Eurofins Midland

Lab Chronicle

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-18320-1

Client Sample ID: MW-1

Date Collected: 08/18/22 11:00

Date Received: 08/18/22 14:48

Lab Sample ID: 880-18320-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	65717	NA	EET HOU	08/19/22 14:35
Total/NA	Analysis	8015 NM		1	64807	MC	EET HOU	08/22/22 17:04
Total/NA	Prep	8015NM Aq Prep			66074	SAR	EET HOU	08/22/22 15:41
Total/NA	Analysis	8015B NM		1	66200	T1S	EET HOU	08/23/22 19:56
Total/NA	Analysis	300.0		1	65810	RBNS	EET HOU	08/20/22 02:15
Total/NA	Analysis	300.0		1	65811	A1S	EET HOU	08/20/22 02:15
Total/NA	Analysis	SM 2320B		1	66106	TL	EET HOU	08/22/22 13:24
Total/NA	Analysis	SM 4500 CO2 D		1	66277	AA	EET HOU	08/23/22 18:04
Total/NA	Analysis	SM 4500 H+ B		1	66063	TL	EET HOU	08/22/22 14:33
Total/NA	Analysis	SM 4500 S2 F		1	66485	YGG	EET HOU	08/25/22 00:46

Client Sample ID: MW-2

Date Collected: 08/18/22 12:05

Date Received: 08/18/22 14:48

Lab Sample ID: 880-18320-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	65717	NA	EET HOU	08/19/22 14:55
Total/NA	Analysis	8260C		5	65717	NA	EET HOU	08/19/22 15:16
Total/NA	Analysis	8015 NM		1	64807	MC	EET HOU	08/22/22 17:04
Total/NA	Prep	8015NM Aq Prep			66074	SAR	EET HOU	08/22/22 15:41
Total/NA	Analysis	8015B NM		1	66200	T1S	EET HOU	08/23/22 20:16
Total/NA	Analysis	300.0		1	65810	RBNS	EET HOU	08/20/22 05:29
Total/NA	Analysis	300.0		1	65811	A1S	EET HOU	08/20/22 05:29
Total/NA	Analysis	SM 2320B		1	66106	TL	EET HOU	08/22/22 13:41
Total/NA	Analysis	SM 4500 CO2 D		1	66277	AA	EET HOU	08/23/22 18:04
Total/NA	Analysis	SM 4500 H+ B		1	66063	TL	EET HOU	08/22/22 14:34
Total/NA	Analysis	SM 4500 S2 F		1	66485	YGG	EET HOU	08/25/22 00:46

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: 880-18320-1

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

Job ID: 880-18320-1

Project/Site: South Hobbs - 03B1417002

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: 880-18320-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-18320-1	MW-1	Water	08/18/22 11:00	08/18/22 14:48
880-18320-2	MW-2	Water	08/18/22 12:05	08/18/22 14:48

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Chain of Custody

Work Order No: 18520

Hobbs NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-833-3333)
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) 585-3443 Lubbock, TX (806) 794-1296

Page 1 of 1

Project Manager:	Beaux Jennings	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Wadley #210	Address:	
City, State ZIP:	Midland TX	City, State ZIP:	
Phone:	432-230-3344	Email:	bennings@ensolum.com

Work Order Comments	
Program: UST/PST ☐ RP ☐ Brownfields ☐ RCC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables EDD ☐ ADAPT ☐ Other ☐	

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

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	32.3						
Received Intact:	Yes	No			Thermometer ID	1122	
Cooler Custody Seals:	Yes	No			Correction Factor:	-20	
Sample Custody Seals:	Yes	No			Total Containers:		

Number of Containers	ANALYSIS REQUIRED
Reduced Carbon Dioxide 4500 CO ₂ c	
Reduced Sulfide SW-846 #376.2	
SW-846 #8260	
SW-846 Method #8015	
EPA Method #846 300	
SW-846 Method 150.1	

[illegible][illegible]

			L	L	Number
		X	X	Dissolve	
		X	X	Dissolve	
		X	X	VOC SW	
		X	X	TPH EP	
		X	X	Chloride	
		X	X	pH EPA	

[illegible]

CUSTODY SEAL

Date 8-18-22

Signature

[Signature]

Thermo
SCIENTIFIC

50006

[illegible]

Signature of the owner/submitter of samples constitutes a valid purchase order from client company to Xencro, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xencro 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 Xencro. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xencro, 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
1 		8/18/22	2		
3 		14.48	4		
5			6		

Eurofins Midland

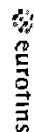
Temp: 54

IR ID: HOU-338

C/F 1.4
Corrected Temp: 2.2

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 Client Contact: Kramer, Jessica Shipping/Receiving: Jessica.Kramer@et.eurofins.com Phone: 880.50311 E-Mail: New Mexico	
Company: Eurofins Environment Testing South Cent Address: 4145 Greenbriar Dr City: Stafford State, Zip: TX 77477 Phone: 281-240-4200(Tel) Email: WGO #: Project Name: South Hobbs Project #: 03B1417002 Site: SSOH#:				Due Date Requested: 8/20/2022 TAT Requested (days): PO #: 88000023 WGO #: SSOH#:	
Analysis Requested				Carrier Tracking No(s): 880.50311 State of Origin: New Mexico Accreditation Required (See note): NE/LAP Texas Job #: 880-18320-1	
Sample Identification				Preservation Codes: A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Amicler H Acetic Acid I TSP Dodecylhydrate J DI Water K EDTA L EDTA Other:	
Sample Identification: Client ID (Lab ID) MW-1 (880-18320-1) MW-2 (880-18320-2)				Sample Date: 8/18/22 Sample Time: 11:00 Sample Type: Mountain Matrix: Water Preservation Code: 187-1818, 1819, 1820	
Field Filtered Sample (Yes or No)				☒	
Perform MS/MSD (Yes or No)				☒	
SM4500_CO2_Df (MOD) Carbon Dioxide SM4500_H+ SM4500_S2_Ff Sulfide, Total 8260C/5030C (MOD) Full List VOCs 8015MOD_NM/8015NM_Aq_Prep (MOD) Full TPH 300_ORGFMS_28Df (MOD) Custom List 300_ORGFMSf (MOD) Custom List 2320Sf (MOD) Copy Analytes 8015MOD_Calc				Total Number of containers: 7 DISSOLVED SULFIDE DISSOLVED SULFIDE DISSOLVED SULFIDE	
Special Instructions/Note:				Special Instructions/Note: Dissolved Sulfide	

Note: Since laboratory accreditation is subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analysis & accreditation compliance upon our 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 institutions 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 Requisitioned by: _____ Date: _____ Time: _____ Method of Shipment: _____
 Requisitioned by: **Shawn** Date/Time: _____ Company: _____ Received by: **Fedex** Date/Time: _____ Company: _____
 Requisitioned by: **Fedex** Date/Time: _____ Company: _____ Received by: **Fedex** Date/Time: **8-19-22 1011** Company: **Verano**
 Requisitioned by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No. _____ Cooler Temperature(s) °C and Other Remarks: _____
 Δ Yes Δ No

Months

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-18320-1

Login Number: 18320

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: 880-18320-1

Login Number: 18320

List Number: 2

Creator: Bolch, Taylor

List Source: Eurofins Houston

List Creation: 08/19/22 12:33 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 America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2835-1

Client Project/Site: Levey Well Hobb 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:

9/7/2022 8:03:03 AM

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 Hobb NM - 03B1417001

Laboratory Job ID: 890-2835-1

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Definitions/Glossary

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

Job ID: 890-2835-1

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.
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
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.
E	Result exceeded calibration range.
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)

Eurofins Carlsbad

Definitions/Glossary

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

Job ID: 890-2835-1

Glossary (Continued)

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

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Case Narrative

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

Job ID: 890-2835-1

Job ID: 890-2835-1

Laboratory: Eurofins Carlsbad

Narrative	
	Job Narrative 890-2835-1

Receipt

The sample was received on 8/24/2022 1:09 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 0.8°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

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 860-66715 and analytical batch 860-66824 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) 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

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

Client Sample ID: Levey Well

Lab Sample ID: 890-2835-1

Date Collected: 08/24/22 10:05

Matrix: Water

Date Received: 08/24/22 13:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00372		0.00100	0.000533	mg/L		08/25/22 13:08	1
Bromobenzene	<0.00100	U	0.00100	0.000665	mg/L		08/25/22 13:08	1
Bromochloromethane	<0.00100	U	0.00100	0.000657	mg/L		08/25/22 13:08	1
Bromodichloromethane	<0.00100	U	0.00100	0.000552	mg/L		08/25/22 13:08	1
Bromoform	<0.00500	U	0.00500	0.000633	mg/L		08/25/22 13:08	1
Bromomethane	<0.00500	U	0.00500	0.00142	mg/L		08/25/22 13:08	1
2-Butanone	<0.0500	U	0.0500	0.00828	mg/L		08/25/22 13:08	1
Carbon tetrachloride	<0.00500	U	0.00500	0.000896	mg/L		08/25/22 13:08	1
Chlorobenzene	<0.00100	U	0.00100	0.000530	mg/L		08/25/22 13:08	1
Chloroethane	<0.0100	U	0.0100	0.00198	mg/L		08/25/22 13:08	1
Chloroform	<0.00100	U	0.00100	0.000643	mg/L		08/25/22 13:08	1
Chloromethane	<0.0100	U	0.0100	0.00204	mg/L		08/25/22 13:08	1
2-Chlorotoluene	<0.00200	U	0.00200	0.00118	mg/L		08/25/22 13:08	1
4-Chlorotoluene	<0.00100	U	0.00100	0.000472	mg/L		08/25/22 13:08	1
cis-1,2-Dichloroethene	<0.00100	U	0.00100	0.000714	mg/L		08/25/22 13:08	1
cis-1,3-Dichloropropene	<0.00500	U	0.00500	0.00107	mg/L		08/25/22 13:08	1
Dibromochloromethane	<0.00500	U	0.00500	0.000547	mg/L		08/25/22 13:08	1
1,2-Dibromo-3-Chloropropane	<0.00500	U	0.00500	0.00127	mg/L		08/25/22 13:08	1
1,2-Dibromoethane	<0.00500	U	0.00500	0.000999	mg/L		08/25/22 13:08	1
1,2-Dichlorobenzene	<0.00100	U	0.00100	0.000509	mg/L		08/25/22 13:08	1
1,3-Dichlorobenzene	<0.00100	U	0.00100	0.000513	mg/L		08/25/22 13:08	1
1,4-Dichlorobenzene	<0.00100	U	0.00100	0.000513	mg/L		08/25/22 13:08	1
Dichlorodifluoromethane	<0.00100	U	0.00100	0.000919	mg/L		08/25/22 13:08	1
1,1-Dichloroethane	<0.00100	U	0.00100	0.000635	mg/L		08/25/22 13:08	1
1,2-Dichloroethane	<0.00100	U	0.00100	0.000590	mg/L		08/25/22 13:08	1
1,1-Dichloroethene	<0.00100	U	0.00100	0.000738	mg/L		08/25/22 13:08	1
1,2-Dichloropropane	<0.00500	U	0.00500	0.000667	mg/L		08/25/22 13:08	1
1,3-Dichloropropane	<0.00500	U	0.00500	0.000514	mg/L		08/25/22 13:08	1
2,2-Dichloropropane	<0.00500	U	0.00500	0.000780	mg/L		08/25/22 13:08	1
1,1-Dichloropropene	<0.00500	U	0.00500	0.00160	mg/L		08/25/22 13:08	1
Ethylbenzene	0.0139		0.00100	0.000411	mg/L		08/25/22 13:08	1
Hexachlorobutadiene	<0.00500	U	0.00500	0.00126	mg/L		08/25/22 13:08	1
Isopropylbenzene	0.00657		0.00100	0.000613	mg/L		08/25/22 13:08	1
Methylene Chloride	<0.00500	U	0.00500	0.00173	mg/L		08/25/22 13:08	1
m,p-Xylenes	0.0564		0.0100	0.00124	mg/L		08/25/22 13:08	1
MTBE	<0.00500	U	0.00500	0.00139	mg/L		08/25/22 13:08	1
Naphthalene	<0.0100	U	0.0100	0.00135	mg/L		08/25/22 13:08	1
n-Butylbenzene	<0.00100	U	0.00100	0.000644	mg/L		08/25/22 13:08	1
N-Propylbenzene	0.00295		0.00100	0.000498	mg/L		08/25/22 13:08	1
o-Xylene	0.00885		0.00100	0.000551	mg/L		08/25/22 13:08	1
p-Cymene (p-Isopropyltoluene)	<0.00100	U	0.00100	0.000919	mg/L		08/25/22 13:08	1
sec-Butylbenzene	<0.00100	U	0.00100	0.000468	mg/L		08/25/22 13:08	1
Styrene	<0.00100	U	0.00100	0.000655	mg/L		08/25/22 13:08	1
tert-Butylbenzene	<0.00100	U	0.00100	0.000442	mg/L		08/25/22 13:08	1
1,1,1,2-Tetrachloroethane	<0.00100	U	0.00100	0.000644	mg/L		08/25/22 13:08	1
1,1,2,2-Tetrachloroethane	<0.00100	U	0.00100	0.000470	mg/L		08/25/22 13:08	1
Tetrachloroethene	<0.00100	U	0.00100	0.000801	mg/L		08/25/22 13:08	1
Toluene	0.0296		0.00100	0.000475	mg/L		08/25/22 13:08	1
trans-1,2-Dichloroethene	<0.00100	U	0.00100	0.000945	mg/L		08/25/22 13:08	1

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Client Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

Client Sample ID: Levey Well

Lab Sample ID: 890-2835-1

Date Collected: 08/24/22 10:05

Matrix: Water

Date Received: 08/24/22 13:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 13:08	1
1,2,3-Trichlorobenzene	<0.00500	U	0.00500	0.00217 mg/L			08/25/22 13:08	1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	0.00175 mg/L			08/25/22 13:08	1
1,1,1-Trichloroethane	<0.00500	U	0.00500	0.00169 mg/L			08/25/22 13:08	1
1,1,2-Trichloroethane	<0.00100	U	0.00100	0.000511 mg/L			08/25/22 13:08	1
Trichloroethene	<0.00500	U	0.00500	0.000791 mg/L			08/25/22 13:08	1
Trichlorofluoromethane	<0.00100	U	0.00100	0.000638 mg/L			08/25/22 13:08	1
1,2,3-Trichloropropane	<0.00100	U	0.00100	0.000490 mg/L			08/25/22 13:08	1
1,2,4-Trimethylbenzene	0.0131		0.00100	0.000417 mg/L			08/25/22 13:08	1
1,3,5-Trimethylbenzene	0.00431		0.00100	0.000456 mg/L			08/25/22 13:08	1
Vinyl chloride	<0.00200	U	0.00200	0.000638 mg/L			08/25/22 13:08	1
Xylenes, Total	0.0653		0.0100	0.00124 mg/L			08/25/22 13:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		74 - 124		08/25/22 13:08	1
Dibromofluoromethane (Surr)	99		75 - 131		08/25/22 13:08	1
1,2-Dichloroethane-d4 (Surr)	100		63 - 144		08/25/22 13:08	1
Toluene-d8 (Surr)	100		80 - 117		08/25/22 13:08	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.500		0.500	0.0711 mg/L			08/25/22 15:52	1
Nitrate as N	<0.100	U	0.100	0.0391 mg/L			08/25/22 15:52	1
Chloride	222		0.500	0.200 mg/L			08/25/22 15:52	1
Nitrite as N	<0.100	U	0.100	0.0293 mg/L			08/25/22 15:52	1
Fluoride	0.674		0.500	0.100 mg/L			08/25/22 15:52	1
Sulfate	48.7		0.500	0.109 mg/L			08/25/22 15:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	229		10.0	5.76 mg/L		08/26/22 10:00	08/26/22 14:06	50
Magnesium	46.5		10.0	2.14 mg/L		08/26/22 10:00	08/26/22 14:06	50
Potassium	3.28		0.500	0.0914 mg/L		08/26/22 10:00	08/26/22 13:48	1
Sodium	72.0		25.0	7.59 mg/L		08/26/22 10:00	08/26/22 14:06	50
SiO2	59.1		1.07	0.471 mg/L		08/26/22 10:00	08/26/22 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	-12.7			%			08/31/22 14:41	1
Percent Difference	-12.7			%			08/31/22 14:41	1
Alkalinity	728		4.00	4.00 mg/L			08/26/22 12:06	1
Bicarbonate Alkalinity as CaCO3	728		4.00	4.00 mg/L			08/26/22 12:06	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/26/22 12:06	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/26/22 12:06	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			08/26/22 12:06	1
Total Dissolved Solids	1280		10.0	10.0 mg/L			08/25/22 15:49	1
pH	6.6	HF		SU			08/26/22 12:40	1
Temperature	17.9	HF		Degrees C			08/26/22 12:40	1

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Surrogate Summary

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

Job ID: 890-2835-1

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)
890-2835-1	Levey Well	96	99	100	100
LCS 860-66490/3	Lab Control Sample	98	102	100	98
LCSD 860-66490/4	Lab Control Sample Dup	98	104	99	98
MB 860-66490/10	Method Blank	95	101	105	99
Surrogate Legend					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
DCA = 1,2-Dichloroethane-d4 (Surr)					
TOL = Toluene-d8 (Surr)					

QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

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

Lab Sample ID: MB 860-66490/10

Matrix: Water

Analysis Batch: 66490

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000533 mg/L			08/25/22 10:24	1
Bromobenzene	<0.00100	U	0.00100	0.000665 mg/L			08/25/22 10:24	1
Bromochloromethane	<0.00100	U	0.00100	0.000657 mg/L			08/25/22 10:24	1
Bromodichloromethane	<0.00100	U	0.00100	0.000552 mg/L			08/25/22 10:24	1
Bromoform	<0.00500	U	0.00500	0.000633 mg/L			08/25/22 10:24	1
Bromomethane	<0.00500	U	0.00500	0.00142 mg/L			08/25/22 10:24	1
2-Butanone	<0.0500	U	0.0500	0.00828 mg/L			08/25/22 10:24	1
Carbon tetrachloride	<0.00500	U	0.00500	0.000896 mg/L			08/25/22 10:24	1
Chlorobenzene	<0.00100	U	0.00100	0.000530 mg/L			08/25/22 10:24	1
Chloroethane	<0.0100	U	0.0100	0.00198 mg/L			08/25/22 10:24	1
Chloroform	<0.00100	U	0.00100	0.000643 mg/L			08/25/22 10:24	1
Chloromethane	<0.0100	U	0.0100	0.00204 mg/L			08/25/22 10:24	1
2-Chlorotoluene	<0.00200	U	0.00200	0.00118 mg/L			08/25/22 10:24	1
4-Chlorotoluene	<0.00100	U	0.00100	0.000472 mg/L			08/25/22 10:24	1
cis-1,2-Dichloroethene	<0.00100	U	0.00100	0.000714 mg/L			08/25/22 10:24	1
cis-1,3-Dichloropropene	<0.00500	U	0.00500	0.00107 mg/L			08/25/22 10:24	1
Dibromochloromethane	<0.00500	U	0.00500	0.000547 mg/L			08/25/22 10:24	1
1,2-Dibromo-3-Chloropropane	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 10:24	1
1,2-Dibromoethane	<0.00500	U	0.00500	0.000999 mg/L			08/25/22 10:24	1
1,2-Dichlorobenzene	<0.00100	U	0.00100	0.000509 mg/L			08/25/22 10:24	1
1,3-Dichlorobenzene	<0.00100	U	0.00100	0.000513 mg/L			08/25/22 10:24	1
1,4-Dichlorobenzene	<0.00100	U	0.00100	0.000513 mg/L			08/25/22 10:24	1
Dichlorodifluoromethane	<0.00100	U	0.00100	0.000919 mg/L			08/25/22 10:24	1
1,1-Dichloroethane	<0.00100	U	0.00100	0.000635 mg/L			08/25/22 10:24	1
1,2-Dichloroethane	<0.00100	U	0.00100	0.000590 mg/L			08/25/22 10:24	1
1,1-Dichloroethene	<0.00100	U	0.00100	0.000738 mg/L			08/25/22 10:24	1
1,2-Dichloropropane	<0.00500	U	0.00500	0.000667 mg/L			08/25/22 10:24	1
1,3-Dichloropropane	<0.00500	U	0.00500	0.000514 mg/L			08/25/22 10:24	1
2,2-Dichloropropane	<0.00500	U	0.00500	0.000780 mg/L			08/25/22 10:24	1
1,1-Dichloropropene	<0.00500	U	0.00500	0.00160 mg/L			08/25/22 10:24	1
Ethylbenzene	<0.00100	U	0.00100	0.000411 mg/L			08/25/22 10:24	1
Hexachlorobutadiene	<0.00500	U	0.00500	0.00126 mg/L			08/25/22 10:24	1
Isopropylbenzene	<0.00100	U	0.00100	0.000613 mg/L			08/25/22 10:24	1
Methylene Chloride	<0.00500	U	0.00500	0.00173 mg/L			08/25/22 10:24	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124 mg/L			08/25/22 10:24	1
MTBE	<0.00500	U	0.00500	0.00139 mg/L			08/25/22 10:24	1
Naphthalene	<0.0100	U	0.0100	0.00135 mg/L			08/25/22 10:24	1
n-Butylbenzene	<0.00100	U	0.00100	0.000644 mg/L			08/25/22 10:24	1
N-Propylbenzene	<0.00100	U	0.00100	0.000498 mg/L			08/25/22 10:24	1
o-Xylene	<0.00100	U	0.00100	0.000551 mg/L			08/25/22 10:24	1
p-Cymene (p-Isopropyltoluene)	<0.00100	U	0.00100	0.000919 mg/L			08/25/22 10:24	1
sec-Butylbenzene	<0.00100	U	0.00100	0.000468 mg/L			08/25/22 10:24	1
Styrene	<0.00100	U	0.00100	0.000655 mg/L			08/25/22 10:24	1
tert-Butylbenzene	<0.00100	U	0.00100	0.000442 mg/L			08/25/22 10:24	1
1,1,1,2-Tetrachloroethane	<0.00100	U	0.00100	0.000644 mg/L			08/25/22 10:24	1
1,1,2,2-Tetrachloroethane	<0.00100	U	0.00100	0.000470 mg/L			08/25/22 10:24	1
Tetrachloroethene	<0.00100	U	0.00100	0.000801 mg/L			08/25/22 10:24	1
Toluene	<0.00100	U	0.00100	0.000475 mg/L			08/25/22 10:24	1

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

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

Lab Sample ID: MB 860-66490/10

Matrix: Water

Analysis Batch: 66490

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	<0.00100	U	0.00100	0.000945 mg/L			08/25/22 10:24	1
trans-1,3-Dichloropropene	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 10:24	1
1,2,3-Trichlorobenzene	<0.00500	U	0.00500	0.00217 mg/L			08/25/22 10:24	1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	0.00175 mg/L			08/25/22 10:24	1
1,1,1-Trichloroethane	<0.00500	U	0.00500	0.00169 mg/L			08/25/22 10:24	1
1,1,2-Trichloroethane	<0.00100	U	0.00100	0.000511 mg/L			08/25/22 10:24	1
Trichloroethene	<0.00500	U	0.00500	0.000791 mg/L			08/25/22 10:24	1
Trichlorofluoromethane	<0.00100	U	0.00100	0.000638 mg/L			08/25/22 10:24	1
1,2,3-Trichloropropane	<0.00100	U	0.00100	0.000490 mg/L			08/25/22 10:24	1
1,2,4-Trimethylbenzene	<0.00100	U	0.00100	0.000417 mg/L			08/25/22 10:24	1
1,3,5-Trimethylbenzene	<0.00100	U	0.00100	0.000456 mg/L			08/25/22 10:24	1
Vinyl chloride	<0.00200	U	0.00200	0.000638 mg/L			08/25/22 10:24	1
Xylenes, Total	<0.0100	U	0.0100	0.00124 mg/L			08/25/22 10:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		74 - 124		08/25/22 10:24	1
Dibromofluoromethane (Surr)	101		75 - 131		08/25/22 10:24	1
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		08/25/22 10:24	1
Toluene-d8 (Surr)	99		80 - 117		08/25/22 10:24	1

Lab Sample ID: LCS 860-66490/3

Matrix: Water

Analysis Batch: 66490

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	0.05124		mg/L		102	66 - 142
Bromobenzene	0.0500	0.05212		mg/L		104	75 - 125
Bromochloromethane	0.0500	0.05207		mg/L		104	60 - 140
Bromodichloromethane	0.0500	0.05382		mg/L		108	75 - 125
Bromoform	0.0500	0.05416		mg/L		108	75 - 125
Bromomethane	0.0500	0.04877		mg/L		98	60 - 140
2-Butanone	0.250	0.2325		mg/L		93	60 - 140
Carbon tetrachloride	0.0500	0.05228		mg/L		105	62 - 125
Chlorobenzene	0.0500	0.05236		mg/L		105	60 - 133
Chloroethane	0.0500	0.04355		mg/L		87	60 - 140
Chloroform	0.0500	0.05193		mg/L		104	70 - 130
Chloromethane	0.0500	0.03825		mg/L		77	60 - 140
2-Chlorotoluene	0.0500	0.05250		mg/L		105	73 - 125
4-Chlorotoluene	0.0500	0.05376		mg/L		108	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05044		mg/L		101	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05224		mg/L		104	74 - 125
Dibromochloromethane	0.0500	0.05360		mg/L		107	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05195		mg/L		104	59 - 125
1,2-Dibromoethane	0.0500	0.05065		mg/L		101	73 - 125
1,2-Dichlorobenzene	0.0500	0.05307		mg/L		106	75 - 125
1,3-Dichlorobenzene	0.0500	0.05344		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05420		mg/L		108	75 - 125
Dichlorodifluoromethane	0.0500	0.03511		mg/L		70	70 - 130

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

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

Lab Sample ID: LCS 860-66490/3

Matrix: Water

Analysis Batch: 66490

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	0.04714		mg/L		94	72 - 125
1,2-Dichloroethane	0.0500	0.05163		mg/L		103	68 - 127
1,1-Dichloroethene	0.0500	0.04860		mg/L		97	59 - 172
1,2-Dichloropropane	0.0500	0.04995		mg/L		100	74 - 125
1,3-Dichloropropane	0.0500	0.04999		mg/L		100	75 - 125
2,2-Dichloropropane	0.0500	0.05299		mg/L		106	75 - 125
1,1-Dichloropropene	0.0500	0.05152		mg/L		103	75 - 125
Ethylbenzene	0.0500	0.05325		mg/L		107	75 - 125
Hexachlorobutadiene	0.0500	0.05154		mg/L		103	75 - 125
Isopropylbenzene	0.0500	0.05316		mg/L		106	75 - 125
Methylene Chloride	0.0500	0.04428		mg/L		89	75 - 125
m,p-Xylenes	0.0500	0.05301		mg/L		106	75 - 125
MTBE	0.0500	0.04427		mg/L		89	65 - 135
Naphthalene	0.0500	0.05373		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05590		mg/L		112	75 - 125
N-Propylbenzene	0.0500	0.05374		mg/L		107	75 - 125
o-Xylene	0.0500	0.05308		mg/L		106	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05523		mg/L		110	75 - 125
sec-Butylbenzene	0.0500	0.05406		mg/L		108	75 - 125
Styrene	0.0500	0.05467		mg/L		109	75 - 125
tert-Butylbenzene	0.0500	0.05234		mg/L		105	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05207		mg/L		104	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05001		mg/L		100	74 - 125
Tetrachloroethene	0.0500	0.05394		mg/L		108	71 - 125
Toluene	0.0500	0.05160		mg/L		103	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04917		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05262		mg/L		105	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05338		mg/L		107	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05585		mg/L		112	75 - 135
1,1,1-Trichloroethane	0.0500	0.05087		mg/L		102	75 - 125
1,1,2-Trichloroethane	0.0500	0.04944		mg/L		99	75 - 127
Trichloroethene	0.0500	0.05410		mg/L		108	62 - 137
Trichlorofluoromethane	0.0500	0.04905		mg/L		98	60 - 140
1,2,3-Trichloropropane	0.0500	0.04627		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05420		mg/L		108	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05482		mg/L		110	60 - 140
Vinyl chloride	0.0500	0.04202		mg/L		84	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	102		75 - 131
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
Toluene-d8 (Surr)	98		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

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

Lab Sample ID: LCSD 860-66490/4

Matrix: Water

Analysis Batch: 66490

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	0.05306		mg/L		106	66 - 142	3	25
Bromobenzene	0.0500	0.05305		mg/L		106	75 - 125	2	25
Bromochloromethane	0.0500	0.05392		mg/L		108	60 - 140	3	25
Bromodichloromethane	0.0500	0.05533		mg/L		111	75 - 125	3	25
Bromoform	0.0500	0.05677		mg/L		114	75 - 125	5	25
Bromomethane	0.0500	0.04814		mg/L		96	60 - 140	1	25
2-Butanone	0.250	0.2393		mg/L		96	60 - 140	3	25
Carbon tetrachloride	0.0500	0.05453		mg/L		109	62 - 125	4	25
Chlorobenzene	0.0500	0.05262		mg/L		105	60 - 133	0	25
Chloroethane	0.0500	0.04367		mg/L		87	60 - 140	0	25
Chloroform	0.0500	0.05424		mg/L		108	70 - 130	4	25
Chloromethane	0.0500	0.03836		mg/L		77	60 - 140	0	25
2-Chlorotoluene	0.0500	0.05323		mg/L		106	73 - 125	1	25
4-Chlorotoluene	0.0500	0.05381		mg/L		108	74 - 125	0	25
cis-1,2-Dichloroethene	0.0500	0.05294		mg/L		106	75 - 125	5	25
cis-1,3-Dichloropropene	0.0500	0.05391		mg/L		108	74 - 125	3	25
Dibromochloromethane	0.0500	0.05487		mg/L		110	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05622		mg/L		112	59 - 125	8	25
1,2-Dibromoethane	0.0500	0.05378		mg/L		108	73 - 125	6	25
1,2-Dichlorobenzene	0.0500	0.05373		mg/L		107	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.05537		mg/L		111	75 - 125	4	25
1,4-Dichlorobenzene	0.0500	0.05394		mg/L		108	75 - 125	0	25
Dichlorodifluoromethane	0.0500	0.03610		mg/L		72	70 - 130	3	25
1,1-Dichloroethane	0.0500	0.04916		mg/L		98	72 - 125	4	25
1,2-Dichloroethane	0.0500	0.05399		mg/L		108	68 - 127	4	25
1,1-Dichloroethene	0.0500	0.05071		mg/L		101	59 - 172	4	25
1,2-Dichloropropane	0.0500	0.05214		mg/L		104	74 - 125	4	25
1,3-Dichloropropane	0.0500	0.04990		mg/L		100	75 - 125	0	25
2,2-Dichloropropane	0.0500	0.05430		mg/L		109	75 - 125	2	25
1,1-Dichloropropene	0.0500	0.05308		mg/L		106	75 - 125	3	25
Ethylbenzene	0.0500	0.05412		mg/L		108	75 - 125	2	25
Hexachlorobutadiene	0.0500	0.05629		mg/L		113	75 - 125	9	25
Isopropylbenzene	0.0500	0.05457		mg/L		109	75 - 125	3	25
Methylene Chloride	0.0500	0.04724		mg/L		94	75 - 125	6	25
m,p-Xylenes	0.0500	0.05375		mg/L		107	75 - 125	1	25
MTBE	0.0500	0.04659		mg/L		93	65 - 135	5	25
Naphthalene	0.0500	0.06134		mg/L		123	70 - 130	13	25
n-Butylbenzene	0.0500	0.05829		mg/L		117	75 - 125	4	25
N-Propylbenzene	0.0500	0.05449		mg/L		109	75 - 125	1	25
o-Xylene	0.0500	0.05389		mg/L		108	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05695		mg/L		114	75 - 125	3	25
sec-Butylbenzene	0.0500	0.05569		mg/L		111	75 - 125	3	25
Styrene	0.0500	0.05537		mg/L		111	75 - 125	1	25
tert-Butylbenzene	0.0500	0.05391		mg/L		108	75 - 125	3	25
1,1,1,2-Tetrachloroethane	0.0500	0.05306		mg/L		106	72 - 125	2	25
1,1,2,2-Tetrachloroethane	0.0500	0.05250		mg/L		105	74 - 125	5	25
Tetrachloroethene	0.0500	0.05581		mg/L		112	71 - 125	3	25
Toluene	0.0500	0.05223		mg/L		104	59 - 139	1	25

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

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

Lab Sample ID: LCSD 860-66490/4

Matrix: Water

Analysis Batch: 66490

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
trans-1,2-Dichloroethene	0.0500	0.05228		mg/L		105	75 - 125	6		25
trans-1,3-Dichloropropene	0.0500	0.05410		mg/L		108	66 - 125	3		25
1,2,3-Trichlorobenzene	0.0500	0.06113		mg/L		122	75 - 137	14		25
1,2,4-Trichlorobenzene	0.0500	0.05958		mg/L		119	75 - 135	6		25
1,1,1-Trichloroethane	0.0500	0.05289		mg/L		106	75 - 125	4		25
1,1,2-Trichloroethane	0.0500	0.05154		mg/L		103	75 - 127	4		25
Trichloroethene	0.0500	0.05604		mg/L		112	62 - 137	4		25
Trichlorofluoromethane	0.0500	0.04928		mg/L		99	60 - 140	0		25
1,2,3-Trichloropropane	0.0500	0.05051		mg/L		101	75 - 125	9		25
1,2,4-Trimethylbenzene	0.0500	0.05474		mg/L		109	75 - 125	1		25
1,3,5-Trimethylbenzene	0.0500	0.05500		mg/L		110	60 - 140	0		25
Vinyl chloride	0.0500	0.04201		mg/L		84	60 - 140	0		25

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	104		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	98		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-66578/3

Matrix: Water

Analysis Batch: 66578

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Bromide	<0.500	U	0.500	0.0711 mg/L			08/25/22 13:50	1
Chloride	<0.500	U	0.500	0.200 mg/L			08/25/22 13:50	1
Fluoride	<0.500	U	0.500	0.100 mg/L			08/25/22 13:50	1
Sulfate	<0.500	U	0.500	0.109 mg/L			08/25/22 13:50	1

Lab Sample ID: LCS 860-66578/6

Matrix: Water

Analysis Batch: 66578

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	RPD
Bromide	10.0	10.50		mg/L		105	90 - 110	
Chloride	10.0	10.54		mg/L		105	90 - 110	
Fluoride	10.0	10.64		mg/L		106	90 - 110	
Sulfate	10.0	10.56		mg/L		106	90 - 110	

Lab Sample ID: LCSD 860-66578/7

Matrix: Water

Analysis Batch: 66578

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Bromide	10.0	10.52		mg/L		105	90 - 110	0		20
Chloride	10.0	10.54		mg/L		105	90 - 110	0		20
Fluoride	10.0	10.66		mg/L		107	90 - 110	0		20

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-66578/7

Matrix: Water

Analysis Batch: 66578

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	10.58		mg/L		106	90 - 110	0	20

Lab Sample ID: LLCS 860-66578/5

Matrix: Water

Analysis Batch: 66578

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	0.500	0.5534		mg/L		111	50 - 150		
Chloride	0.500	0.5535		mg/L		111	50 - 150		
Fluoride	0.500	0.5380		mg/L		108	50 - 150		
Sulfate	0.500	0.5349		mg/L		107	50 - 150		

Lab Sample ID: 890-2835-1 MS

Matrix: Water

Analysis Batch: 66578

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	RPD	RPD Limit
Bromide	0.500		10.0	10.91		mg/L		104	90 - 110		
Chloride	222		10.0	228.2	4	mg/L		59	90 - 110		
Fluoride	0.674		10.0	10.67		mg/L		100	90 - 110		
Sulfate	48.7		10.0	58.75	4	mg/L		100	90 - 110		

Lab Sample ID: 890-2835-1 MSD

Matrix: Water

Analysis Batch: 66578

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	0.500		10.0	10.93		mg/L		104	90 - 110	0	20
Chloride	222		10.0	227.5	4	mg/L		52	90 - 110	0	20
Fluoride	0.674		10.0	10.66		mg/L		100	90 - 110	0	20
Sulfate	48.7		10.0	58.63	4	mg/L		99	90 - 110	0	20

Lab Sample ID: MB 860-66579/3

Matrix: Water

Analysis Batch: 66579

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.100	U	0.100	0.0391 mg/L			08/25/22 13:50	1
Nitrite as N	0.03275	J	0.100	0.0293 mg/L			08/25/22 13:50	1

Lab Sample ID: LCS 860-66579/6

Matrix: Water

Analysis Batch: 66579

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	10.0	10.66		mg/L		107	80 - 120		
Nitrite as N	5.00	5.131		mg/L		103	80 - 120		

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-66579/7

Matrix: Water

Analysis Batch: 66579

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	10.69		mg/L		107	80 - 120	0	20
Nitrite as N	5.00	5.139		mg/L		103	80 - 120	0	20

Lab Sample ID: LLCS 860-66579/4

Matrix: Water

Analysis Batch: 66579

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.100	0.1017		mg/L		102	50 - 150		
Nitrite as N	0.100	0.1021		mg/L		102	50 - 150		

Lab Sample ID: 890-2835-1 MS

Matrix: Water

Analysis Batch: 66579

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	RPD	RPD Limit
Nitrate as N	<0.100	U	10.0	10.45		mg/L		104	80 - 120		
Nitrite as N	<0.100	U	2.50	2.333		mg/L		93	80 - 120		

Lab Sample ID: 890-2835-1 MSD

Matrix: Water

Analysis Batch: 66579

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	<0.100	U	10.0	10.42		mg/L		104	80 - 120	0	15
Nitrite as N	<0.100	U	2.50	2.332		mg/L		93	80 - 120	0	15

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-66715/1-A

Matrix: Water

Analysis Batch: 66824

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 66715

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.200	U	0.200	0.115 mg/L		08/26/22 10:00	08/26/22 13:37	1
Magnesium	<0.200	U	0.200	0.0428 mg/L		08/26/22 10:00	08/26/22 13:37	1
Potassium	<0.500	U	0.500	0.0914 mg/L		08/26/22 10:00	08/26/22 13:37	1
Sodium	<0.500	U	0.500	0.152 mg/L		08/26/22 10:00	08/26/22 13:37	1
SiO2	<1.07	U	1.07	0.471 mg/L		08/26/22 10:00	08/26/22 13:37	1

Lab Sample ID: LCS 860-66715/2-A

Matrix: Water

Analysis Batch: 66824

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 66715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	25.00		mg/L		100	85 - 115		
Magnesium	25.0	24.47		mg/L		98	85 - 115		
Potassium	10.0	10.10		mg/L		101	85 - 115		
Sodium	25.0	24.87		mg/L		99	85 - 115		
SiO2	21.4	22.11		mg/L		103	85 - 115		

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LCSD 860-66715/3-A

Matrix: Water

Analysis Batch: 66824

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 66715

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier	Limits			RPD	Limit		
Calcium	25.0	25.06			mg/L		100	85 - 115	0	20
Magnesium	25.0	24.54			mg/L		98	85 - 115	0	20
Potassium	10.0	10.15			mg/L		102	85 - 115	1	20
Sodium	25.0	25.01			mg/L		100	85 - 115	1	20
SiO2	21.4	22.25			mg/L		104	85 - 115	1	20

Lab Sample ID: LLCS 860-66715/4-A

Matrix: Water

Analysis Batch: 66824

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 66715

Analyte	Spike		LLCS	LLCS	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits	RPD		
Calcium	0.200	0.1959	J		mg/L		98	50 - 150		
Magnesium	0.200	0.1867	J		mg/L		93	50 - 150		
Potassium	0.500	0.5074			mg/L		101	50 - 150		
Sodium	0.500	0.4284	J		mg/L		86	50 - 150		
SiO2	1.07	1.021	J		mg/L		95	50 - 150		

Lab Sample ID: 890-2835-1 MS

Matrix: Water

Analysis Batch: 66824

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 66715

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier			Limits	Limits		
Calcium	206	E	25.0	232.0	E 4	mg/L		104	70 - 130		
Magnesium	41.3		25.0	63.97		mg/L		90	70 - 130		
Potassium	3.28		10.0	12.86		mg/L		96	70 - 130		
Sodium	65.3		25.0	89.30		mg/L		96	70 - 130		
SiO2	59.1		21.4	80.74		mg/L		101	70 - 130		

Lab Sample ID: 890-2835-1 MSD

Matrix: Water

Analysis Batch: 66824

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 66715

	Sample	Sample	Spike	MSD	MSD			%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Calcium	206	E	25.0	232.5	E 4	mg/L		106	70 - 130	0	20
Magnesium	41.3		25.0	64.05		mg/L		91	70 - 130	0	20
Potassium	3.28		10.0	12.88		mg/L		96	70 - 130	0	20
Sodium	65.3		25.0	89.25		mg/L		96	70 - 130	0	20
SiO2	59.1		21.4	80.66		mg/L		101	70 - 130	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-66827/4

Matrix: Water

Analysis Batch: 66827

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Alkalinity	<4.00	U	4.00	4.00 mg/L			08/26/22 11:35	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/26/22 11:35	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/26/22 11:35	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			08/26/22 11:35	1

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QC Sample Results

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 860-66827/4

Matrix: Water

Analysis Batch: 66827

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			08/26/22 11:35	1

Lab Sample ID: LCS 860-66827/5

Matrix: Water

Analysis Batch: 66827

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	252.3		mg/L		101	85 - 115

Lab Sample ID: LCSD 860-66827/6

Matrix: Water

Analysis Batch: 66827

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	251.5		mg/L		101	85 - 115	0	20

Lab Sample ID: 890-2835-1 DU

Matrix: Water

Analysis Batch: 66827

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	728		727.4		mg/L		0.1	20
Bicarbonate Alkalinity as CaCO3	728		727.4		mg/L		0.1	20
Carbonate Alkalinity as CaCO3	<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 860-66621/1

Matrix: Water

Analysis Batch: 66621

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			08/25/22 15:49	1

Lab Sample ID: LCS 860-66621/2

Matrix: Water

Analysis Batch: 66621

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	1000		mg/L		100	80 - 120

Lab Sample ID: LCSD 860-66621/3

Matrix: Water

Analysis Batch: 66621

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	970.0		mg/L		97	80 - 120	3	10

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QC Association Summary

Client: Ensolum

Job ID: 890-2835-1

Project/Site: Levey Well Hobb NM - 03B1417001

GC/MS VOA

Analysis Batch: 66490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total/NA	Water	8260C	
MB 860-66490/10	Method Blank	Total/NA	Water	8260C	
LCS 860-66490/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-66490/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 66578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total/NA	Water	300.0	
MB 860-66578/3	Method Blank	Total/NA	Water	300.0	
LCS 860-66578/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-66578/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-66578/5	Lab Control Sample	Total/NA	Water	300.0	
890-2835-1 MS	Levey Well	Total/NA	Water	300.0	
890-2835-1 MSD	Levey Well	Total/NA	Water	300.0	

Analysis Batch: 66579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total/NA	Water	300.0	
MB 860-66579/3	Method Blank	Total/NA	Water	300.0	
LCS 860-66579/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-66579/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-66579/4	Lab Control Sample	Total/NA	Water	300.0	
890-2835-1 MS	Levey Well	Total/NA	Water	300.0	
890-2835-1 MSD	Levey Well	Total/NA	Water	300.0	

Metals

Prep Batch: 66715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-66715/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-66715/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-66715/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-66715/4-A	Lab Control Sample	Total Recoverable	Water	200.7	
890-2835-1 MS	Levey Well	Total Recoverable	Water	200.7	
890-2835-1 MSD	Levey Well	Total Recoverable	Water	200.7	

Analysis Batch: 66824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66715
890-2835-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66715
MB 860-66715/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	66715
LCS 860-66715/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	66715
LCSD 860-66715/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	66715
LLCS 860-66715/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	66715
890-2835-1 MS	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66715
890-2835-1 MSD	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	66715

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QC Association Summary

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

Job ID: 890-2835-1

General Chemistry

Analysis Batch: 66621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-66621/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-66621/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-66621/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 66765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 66827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-66827/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-66827/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-66827/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
890-2835-1 DU	Levey Well	Total/NA	Water	SM 2320B	

Analysis Batch: 67391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2835-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 890-2835-1

Client Sample ID: Levey Well
Date Collected: 08/24/22 10:05
Date Received: 08/24/22 13:09

Lab Sample ID: 890-2835-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	66490	08/25/22 13:08	NA	EET HOU
Total/NA	Analysis	300.0		1			66578	08/25/22 15:52	A1S	EET HOU
Total/NA	Analysis	300.0		1			66579	08/25/22 15:52	A1S	EET HOU
Total Recoverable	Prep	200.7			50 mL	50 mL	66715	08/26/22 10:00	MD	EET HOU
Total Recoverable	Analysis	200.7 Rev 4.4		1			66824	08/26/22 13:48	DP	EET HOU
Total Recoverable	Prep	200.7			50 mL	50 mL	66715	08/26/22 10:00	MD	EET HOU
Total Recoverable	Analysis	200.7 Rev 4.4		50			66824	08/26/22 14:06	DP	EET HOU
Total/NA	Analysis	SM 1030E		1			67391	08/31/22 14:41	AA	EET HOU
Total/NA	Analysis	SM 2320B		1			66827	08/26/22 12:06	TL	EET HOU
Total/NA	Analysis	SM 2540C		1	100 mL	200 mL	66621	08/25/22 15:49	MCA	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			66765	08/26/22 12:40	TL	EET HOU

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 Hobb NM - 03B1417001

Job ID: 890-2835-1

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
200.7 Rev 4.4	200.7	Water	SiO2
SM 1030E		Water	Anion/Cation Balance
SM 1030E		Water	Percent Difference
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 Hobb NM - 03B1417001

Job ID: 890-2835-1

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 Hobb NM - 03B1417001

Job ID: 890-2835-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2835-1	Levey Well	Water	08/24/22 10:05	08/24/22 13:09

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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) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 820-2000

Chain of Custody

Work Order No: _____

Project Manager:	Beaux Jennings	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Wadley #210	Address:	
City, State ZIP:	Midland TX	City, State ZIP:	
Phone:	432-230-3344	Email:	bjennings@ensolum.com

Program: ☐ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ 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	Well loc: ☒ Yes ☐ No
Temperature (°C):	1.0 / 0.8	Thermometer ID
Received In tact:	☒ Yes ☐ No	Correction Factor: -0.2
Cooler Custody Seals:	☒ Yes ☐ No	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	8-24-22	1005	-	7	X	X	X	X	X	X	24hr

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					
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Shane Diller</i>	<i>Joe G</i>	8-24-22 1309			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2835-1

Login Number: 2835

List Source: Eurofins Carlsbad

List Number: 1

Creator: Kramer, Jessica

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: 890-2835-1

Login Number: 2835

List Source: Eurofins Houston

List Number: 2

List Creation: 08/25/22 12:28 PM

Creator: Rubio, Yuri

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?	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	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2836-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

Revision: 1

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

Authorized for release by:

9/7/2022 8:16:47 AM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

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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: South Hobbs - 03B1417002

Laboratory Job ID: 890-2836-1

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Definitions/Glossary

Client: Ensolum

Job ID: 890-2836-1

Project/Site: South Hobbs - 03B1417002

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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.
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.
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.

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

Eurofins Carlsbad

Definitions/Glossary

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

Job ID: 890-2836-1

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: 890-2836-1

Job ID: 890-2836-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2836-1

REVISION

The report being provided is a revision of the original report sent on 9/6/2022. The report (revision 1) is being revised due to Sample containers were switched when labeled in laboratory..

Report revision history

Receipt

The samples were received on 8/24/2022 1:09 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 0.8°C

GC/MS VOA

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-66490 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_ORGFMS: The method blank for analytical batch 860-66579 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.

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: South Hobbs - 03B1417002

Job ID: 890-2836-1

Client Sample ID: MW-2

Lab Sample ID: 890-2836-1

Date Collected: 08/24/22 10:30

Matrix: Water

Date Received: 08/24/22 13:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0162		0.00100	0.000533 mg/L			08/25/22 17:34	1
Bromobenzene	<0.00100 U		0.00100	0.000665 mg/L			08/25/22 17:34	1
Bromochloromethane	<0.00100 U		0.00100	0.000657 mg/L			08/25/22 17:34	1
Bromodichloromethane	<0.00100 U		0.00100	0.000552 mg/L			08/25/22 17:34	1
Bromoform	<0.00500 U		0.00500	0.000633 mg/L			08/25/22 17:34	1
Bromomethane	<0.00500 U		0.00500	0.00142 mg/L			08/25/22 17:34	1
2-Butanone	<0.0500 U		0.0500	0.00828 mg/L			08/25/22 17:34	1
Carbon tetrachloride	<0.00500 U		0.00500	0.000896 mg/L			08/25/22 17:34	1
Chlorobenzene	<0.00100 U		0.00100	0.000530 mg/L			08/25/22 17:34	1
Chloroethane	<0.0100 U		0.0100	0.00198 mg/L			08/25/22 17:34	1
Chloroform	<0.00100 U		0.00100	0.000643 mg/L			08/25/22 17:34	1
Chloromethane	<0.0100 U		0.0100	0.00204 mg/L			08/25/22 17:34	1
2-Chlorotoluene	<0.00200 U		0.00200	0.00118 mg/L			08/25/22 17:34	1
4-Chlorotoluene	<0.00100 U		0.00100	0.000472 mg/L			08/25/22 17:34	1
cis-1,2-Dichloroethene	<0.00100 U		0.00100	0.000714 mg/L			08/25/22 17:34	1
cis-1,3-Dichloropropene	<0.00500 U		0.00500	0.00107 mg/L			08/25/22 17:34	1
Dibromochloromethane	<0.00500 U		0.00500	0.000547 mg/L			08/25/22 17:34	1
1,2-Dibromo-3-Chloropropane	<0.00500 U		0.00500	0.00127 mg/L			08/25/22 17:34	1
1,2-Dibromoethane	<0.00500 U		0.00500	0.000999 mg/L			08/25/22 17:34	1
1,2-Dichlorobenzene	<0.00100 U		0.00100	0.000509 mg/L			08/25/22 17:34	1
1,3-Dichlorobenzene	<0.00100 U		0.00100	0.000513 mg/L			08/25/22 17:34	1
1,4-Dichlorobenzene	<0.00100 U		0.00100	0.000513 mg/L			08/25/22 17:34	1
Dichlorodifluoromethane	<0.00100 U		0.00100	0.000919 mg/L			08/25/22 17:34	1
1,1-Dichloroethane	<0.00100 U		0.00100	0.000635 mg/L			08/25/22 17:34	1
1,2-Dichloroethane	<0.00100 U		0.00100	0.000590 mg/L			08/25/22 17:34	1
1,1-Dichloroethene	<0.00100 U		0.00100	0.000738 mg/L			08/25/22 17:34	1
1,2-Dichloropropane	<0.00500 U		0.00500	0.000667 mg/L			08/25/22 17:34	1
1,3-Dichloropropane	<0.00500 U		0.00500	0.000514 mg/L			08/25/22 17:34	1
2,2-Dichloropropane	<0.00500 U		0.00500	0.000780 mg/L			08/25/22 17:34	1
1,1-Dichloropropene	<0.00500 U		0.00500	0.00160 mg/L			08/25/22 17:34	1
Ethylbenzene	0.0235		0.00100	0.000411 mg/L			08/25/22 17:34	1
Hexachlorobutadiene	<0.00500 U		0.00500	0.00126 mg/L			08/25/22 17:34	1
Isopropylbenzene	0.0103		0.00100	0.000613 mg/L			08/25/22 17:34	1
Methylene Chloride	<0.00500 U		0.00500	0.00173 mg/L			08/25/22 17:34	1
m,p-Xylenes	0.126		0.0100	0.00124 mg/L			08/25/22 17:34	1
MTBE	<0.00500 U		0.00500	0.00139 mg/L			08/25/22 17:34	1
Naphthalene	<0.0100 U		0.0100	0.00135 mg/L			08/25/22 17:34	1
n-Butylbenzene	<0.00100 U		0.00100	0.000644 mg/L			08/25/22 17:34	1
N-Propylbenzene	0.00274		0.00100	0.000498 mg/L			08/25/22 17:34	1
o-Xylene	0.0103		0.00100	0.000551 mg/L			08/25/22 17:34	1
p-Cymene (p-Isopropyltoluene)	<0.00100 U		0.00100	0.000919 mg/L			08/25/22 17:34	1
sec-Butylbenzene	0.00106		0.00100	0.000468 mg/L			08/25/22 17:34	1
Styrene	<0.00100 U		0.00100	0.000655 mg/L			08/25/22 17:34	1
tert-Butylbenzene	<0.00100 U		0.00100	0.000442 mg/L			08/25/22 17:34	1
1,1,1,2-Tetrachloroethane	<0.00100 U		0.00100	0.000644 mg/L			08/25/22 17:34	1
1,1,2,2-Tetrachloroethane	<0.00100 U		0.00100	0.000470 mg/L			08/25/22 17:34	1
Tetrachloroethene	<0.00100 U		0.00100	0.000801 mg/L			08/25/22 17:34	1
Toluene	0.00167		0.00100	0.000475 mg/L			08/25/22 17:34	1
trans-1,2-Dichloroethene	<0.00100 U		0.00100	0.000945 mg/L			08/25/22 17:34	1

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Client Sample Results

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

Job ID: 890-2836-1

Client Sample ID: MW-2

Lab Sample ID: 890-2836-1

Date Collected: 08/24/22 10:30

Matrix: Water

Date Received: 08/24/22 13:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 17:34	1
1,2,3-Trichlorobenzene	<0.00500	U	0.00500	0.00217 mg/L			08/25/22 17:34	1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	0.00175 mg/L			08/25/22 17:34	1
1,1,1-Trichloroethane	<0.00500	U	0.00500	0.00169 mg/L			08/25/22 17:34	1
1,1,2-Trichloroethane	<0.00100	U	0.00100	0.000511 mg/L			08/25/22 17:34	1
Trichloroethene	<0.00500	U	0.00500	0.000791 mg/L			08/25/22 17:34	1
Trichlorofluoromethane	<0.00100	U	0.00100	0.000638 mg/L			08/25/22 17:34	1
1,2,3-Trichloropropane	<0.00100	U	0.00100	0.000490 mg/L			08/25/22 17:34	1
1,2,4-Trimethylbenzene	0.0347		0.00100	0.000417 mg/L			08/25/22 17:34	1
1,3,5-Trimethylbenzene	0.00917		0.00100	0.000456 mg/L			08/25/22 17:34	1
Vinyl chloride	<0.00200	U	0.00200	0.000638 mg/L			08/25/22 17:34	1
Xylenes, Total	0.136		0.0100	0.00124 mg/L			08/25/22 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		74 - 124		08/25/22 17:34	1
Dibromofluoromethane (Surr)	97		75 - 131		08/25/22 17:34	1
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		08/25/22 17:34	1
Toluene-d8 (Surr)	103		80 - 117		08/25/22 17:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<4.78	U	4.78	0.944 mg/L			08/26/22 15:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.78	U	4.78	0.944 mg/L		08/26/22 11:32	08/26/22 13:52	1
Diesel Range Organics (Over C10-C28)	<4.78	U	4.78	0.944 mg/L		08/26/22 11:32	08/26/22 13:52	1
Oil Range Organics (Over C28-C36)	<4.78	U	4.78	0.911 mg/L		08/26/22 11:32	08/26/22 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 135	08/26/22 11:32	08/26/22 13:52	1
o-Terphenyl	97		70 - 135	08/26/22 11:32	08/26/22 13:52	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.0		0.500	0.200 mg/L			08/25/22 19:02	1
Nitrate as N	<0.100	U	0.100	0.0391 mg/L			08/25/22 19:02	1
Fluoride	0.739		0.500	0.100 mg/L			08/25/22 19:02	1
Nitrite as N	<0.100	U	0.100	0.0293 mg/L			08/25/22 19:02	1
Sulfate	40.8		0.500	0.109 mg/L			08/25/22 19:02	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	273		4.00	4.00 mg/L			08/26/22 12:26	1
Bicarbonate Alkalinity as CaCO3	273		4.00	4.00 mg/L			08/26/22 12:26	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/26/22 12:26	1
Carbon dioxide	275			mg/L			09/02/22 16:50	1
Carbon Dioxide, Free	34.4			mg/L			09/02/22 16:50	1
pH	7.2	HF		SU			08/26/22 12:59	1

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Client Sample Results

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

Job ID: 890-2836-1

Client Sample ID: MW-2

Lab Sample ID: 890-2836-1

Date Collected: 08/24/22 10:30

Matrix: Water

Date Received: 08/24/22 13:09

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature	18.2	HF		Degrees C			08/26/22 12:59	1
Sulfide	1.40	J	5.00	0.495 mg/L			08/26/22 17:24	1

Client Sample ID: MW-1

Lab Sample ID: 890-2836-2

Date Collected: 08/24/22 11:25

Matrix: Water

Date Received: 08/24/22 13:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000533 mg/L			08/25/22 17:14	1
Bromobenzene	<0.00100	U	0.00100	0.000665 mg/L			08/25/22 17:14	1
Bromochloromethane	<0.00100	U	0.00100	0.000657 mg/L			08/25/22 17:14	1
Bromodichloromethane	<0.00100	U	0.00100	0.000552 mg/L			08/25/22 17:14	1
Bromoform	<0.00500	U	0.00500	0.000633 mg/L			08/25/22 17:14	1
Bromomethane	<0.00500	U	0.00500	0.00142 mg/L			08/25/22 17:14	1
2-Butanone	<0.0500	U	0.0500	0.00828 mg/L			08/25/22 17:14	1
Carbon tetrachloride	<0.00500	U	0.00500	0.000896 mg/L			08/25/22 17:14	1
Chlorobenzene	<0.00100	U	0.00100	0.000530 mg/L			08/25/22 17:14	1
Chloroethane	<0.0100	U	0.0100	0.00198 mg/L			08/25/22 17:14	1
Chloroform	<0.00100	U	0.00100	0.000643 mg/L			08/25/22 17:14	1
Chloromethane	<0.0100	U	0.0100	0.00204 mg/L			08/25/22 17:14	1
2-Chlorotoluene	<0.00200	U	0.00200	0.00118 mg/L			08/25/22 17:14	1
4-Chlorotoluene	<0.00100	U	0.00100	0.000472 mg/L			08/25/22 17:14	1
cis-1,2-Dichloroethene	<0.00100	U	0.00100	0.000714 mg/L			08/25/22 17:14	1
cis-1,3-Dichloropropene	<0.00500	U	0.00500	0.00107 mg/L			08/25/22 17:14	1
Dibromochloromethane	<0.00500	U	0.00500	0.000547 mg/L			08/25/22 17:14	1
1,2-Dibromo-3-Chloropropane	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 17:14	1
1,2-Dibromoethane	<0.00500	U	0.00500	0.000999 mg/L			08/25/22 17:14	1
1,2-Dichlorobenzene	<0.00100	U	0.00100	0.000509 mg/L			08/25/22 17:14	1
1,3-Dichlorobenzene	<0.00100	U	0.00100	0.000513 mg/L			08/25/22 17:14	1
1,4-Dichlorobenzene	<0.00100	U	0.00100	0.000513 mg/L			08/25/22 17:14	1
Dichlorodifluoromethane	<0.00100	U	0.00100	0.000919 mg/L			08/25/22 17:14	1
1,1-Dichloroethane	<0.00100	U	0.00100	0.000635 mg/L			08/25/22 17:14	1
1,2-Dichloroethane	<0.00100	U	0.00100	0.000590 mg/L			08/25/22 17:14	1
1,1-Dichloroethene	<0.00100	U	0.00100	0.000738 mg/L			08/25/22 17:14	1
1,2-Dichloropropane	<0.00500	U	0.00500	0.000667 mg/L			08/25/22 17:14	1
1,3-Dichloropropane	<0.00500	U	0.00500	0.000514 mg/L			08/25/22 17:14	1
2,2-Dichloropropane	<0.00500	U	0.00500	0.000780 mg/L			08/25/22 17:14	1
1,1-Dichloropropene	<0.00500	U	0.00500	0.00160 mg/L			08/25/22 17:14	1
Ethylbenzene	<0.00100	U	0.00100	0.000411 mg/L			08/25/22 17:14	1
Hexachlorobutadiene	<0.00500	U	0.00500	0.00126 mg/L			08/25/22 17:14	1
Isopropylbenzene	<0.00100	U	0.00100	0.000613 mg/L			08/25/22 17:14	1
Methylene Chloride	<0.00500	U	0.00500	0.00173 mg/L			08/25/22 17:14	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124 mg/L			08/25/22 17:14	1
MTBE	<0.00500	U	0.00500	0.00139 mg/L			08/25/22 17:14	1
Naphthalene	<0.0100	U	0.0100	0.00135 mg/L			08/25/22 17:14	1
n-Butylbenzene	<0.00100	U	0.00100	0.000644 mg/L			08/25/22 17:14	1
N-Propylbenzene	<0.00100	U	0.00100	0.000498 mg/L			08/25/22 17:14	1
o-Xylene	<0.00100	U	0.00100	0.000551 mg/L			08/25/22 17:14	1
p-Cymene (p-Isopropyltoluene)	<0.00100	U	0.00100	0.000919 mg/L			08/25/22 17:14	1

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Client Sample Results

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

Job ID: 890-2836-1

Client Sample ID: MW-1

Lab Sample ID: 890-2836-2

Date Collected: 08/24/22 11:25

Matrix: Water

Date Received: 08/24/22 13:09

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.00100	U	0.00100	0.000468 mg/L			08/25/22 17:14	1
Styrene	<0.00100	U	0.00100	0.000655 mg/L			08/25/22 17:14	1
tert-Butylbenzene	<0.00100	U	0.00100	0.000442 mg/L			08/25/22 17:14	1
1,1,1,2-Tetrachloroethane	<0.00100	U	0.00100	0.000644 mg/L			08/25/22 17:14	1
1,1,2,2-Tetrachloroethane	<0.00100	U	0.00100	0.000470 mg/L			08/25/22 17:14	1
Tetrachloroethene	<0.00100	U	0.00100	0.000801 mg/L			08/25/22 17:14	1
Toluene	<0.00100	U	0.00100	0.000475 mg/L			08/25/22 17:14	1
trans-1,2-Dichloroethene	<0.00100	U	0.00100	0.000945 mg/L			08/25/22 17:14	1
trans-1,3-Dichloropropene	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 17:14	1
1,2,3-Trichlorobenzene	<0.00500	U	0.00500	0.00217 mg/L			08/25/22 17:14	1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	0.00175 mg/L			08/25/22 17:14	1
1,1,1-Trichloroethane	<0.00500	U	0.00500	0.00169 mg/L			08/25/22 17:14	1
1,1,2-Trichloroethane	<0.00100	U	0.00100	0.000511 mg/L			08/25/22 17:14	1
Trichloroethene	<0.00500	U	0.00500	0.000791 mg/L			08/25/22 17:14	1
Trichlorofluoromethane	<0.00100	U	0.00100	0.000638 mg/L			08/25/22 17:14	1
1,2,3-Trichloropropane	<0.00100	U	0.00100	0.000490 mg/L			08/25/22 17:14	1
1,2,4-Trimethylbenzene	<0.00100	U	0.00100	0.000417 mg/L			08/25/22 17:14	1
1,3,5-Trimethylbenzene	<0.00100	U	0.00100	0.000456 mg/L			08/25/22 17:14	1
Vinyl chloride	<0.00200	U	0.00200	0.000638 mg/L			08/25/22 17:14	1
Xylenes, Total	<0.0100	U	0.0100	0.00124 mg/L			08/25/22 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		74 - 124		08/25/22 17:14	1
Dibromofluoromethane (Surr)	101		75 - 131		08/25/22 17:14	1
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		08/25/22 17:14	1
Toluene-d8 (Surr)	100		80 - 117		08/25/22 17:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.18	J	4.63	0.915 mg/L			08/26/22 15:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.18	J	4.63	0.915 mg/L		08/26/22 11:32	08/26/22 15:10	1
Diesel Range Organics (Over C10-C28)	<4.63	U	4.63	0.915 mg/L		08/26/22 11:32	08/26/22 15:10	1
Oil Range Organics (Over C28-C36)	<4.63	U	4.63	0.883 mg/L		08/26/22 11:32	08/26/22 15:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 135	08/26/22 11:32	08/26/22 15:10	1
o-Terphenyl	94		70 - 135	08/26/22 11:32	08/26/22 15:10	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		0.500	0.200 mg/L			08/25/22 19:37	1
Nitrate as N	0.282		0.100	0.0391 mg/L			08/25/22 19:37	1
Fluoride	0.172	J	0.500	0.100 mg/L			08/25/22 19:37	1
Nitrite as N	0.427	B	0.100	0.0293 mg/L			08/25/22 19:37	1
Sulfate	103		0.500	0.109 mg/L			08/25/22 19:37	1

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Client Sample Results

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

Job ID: 890-2836-1

Client Sample ID: MW-1

Date Collected: 08/24/22 11:25

Date Received: 08/24/22 13:09

Lab Sample ID: 890-2836-2

Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1290		4.00	4.00	mg/L			08/26/22 12:42	1
Bicarbonate Alkalinity as CaCO3	1290		4.00	4.00	mg/L			08/26/22 12:42	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			08/26/22 12:42	1
Carbon dioxide	2430				mg/L			09/02/22 16:50	1
Carbon Dioxide, Free	1300				mg/L			09/02/22 16:50	1
pH	6.3	HF			SU			08/26/22 13:01	1
Temperature	18.0	HF			Degrees C			08/26/22 13:01	1
Sulfide	<5.00	U	5.00	0.495	mg/L			08/26/22 17:24	1

Surrogate Summary

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

Job ID: 890-2836-1

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)
860-31961-F-15 MS	Matrix Spike	98	101	97	99
890-2836-1	MW-2	96	97	104	103
890-2836-2	MW-1	95	101	106	100
LCS 860-66490/3	Lab Control Sample	98	102	100	98
LCSD 860-66490/4	Lab Control Sample Dup	98	104	99	98
MB 860-66490/10	Method Blank	95	101	105	99

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)
890-2836-1	MW-2	87	97
890-2836-2	MW-1	81	94
LCS 860-66749/2-A	Lab Control Sample	107	92
LCSD 860-66749/3-A	Lab Control Sample Dup	112	102
MB 860-66749/1-A	Method Blank	107	120

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 890-2836-1

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

Lab Sample ID: MB 860-66490/10

Matrix: Water

Analysis Batch: 66490

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000533 mg/L			08/25/22 10:24	1
Bromobenzene	<0.00100	U	0.00100	0.000665 mg/L			08/25/22 10:24	1
Bromochloromethane	<0.00100	U	0.00100	0.000657 mg/L			08/25/22 10:24	1
Bromodichloromethane	<0.00100	U	0.00100	0.000552 mg/L			08/25/22 10:24	1
Bromoform	<0.00500	U	0.00500	0.000633 mg/L			08/25/22 10:24	1
Bromomethane	<0.00500	U	0.00500	0.00142 mg/L			08/25/22 10:24	1
2-Butanone	<0.0500	U	0.0500	0.00828 mg/L			08/25/22 10:24	1
Carbon tetrachloride	<0.00500	U	0.00500	0.000896 mg/L			08/25/22 10:24	1
Chlorobenzene	<0.00100	U	0.00100	0.000530 mg/L			08/25/22 10:24	1
Chloroethane	<0.0100	U	0.0100	0.00198 mg/L			08/25/22 10:24	1
Chloroform	<0.00100	U	0.00100	0.000643 mg/L			08/25/22 10:24	1
Chloromethane	<0.0100	U	0.0100	0.00204 mg/L			08/25/22 10:24	1
2-Chlorotoluene	<0.00200	U	0.00200	0.00118 mg/L			08/25/22 10:24	1
4-Chlorotoluene	<0.00100	U	0.00100	0.000472 mg/L			08/25/22 10:24	1
cis-1,2-Dichloroethene	<0.00100	U	0.00100	0.000714 mg/L			08/25/22 10:24	1
cis-1,3-Dichloropropene	<0.00500	U	0.00500	0.00107 mg/L			08/25/22 10:24	1
Dibromochloromethane	<0.00500	U	0.00500	0.000547 mg/L			08/25/22 10:24	1
1,2-Dibromo-3-Chloropropane	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 10:24	1
1,2-Dibromoethane	<0.00500	U	0.00500	0.000999 mg/L			08/25/22 10:24	1
1,2-Dichlorobenzene	<0.00100	U	0.00100	0.000509 mg/L			08/25/22 10:24	1
1,3-Dichlorobenzene	<0.00100	U	0.00100	0.000513 mg/L			08/25/22 10:24	1
1,4-Dichlorobenzene	<0.00100	U	0.00100	0.000513 mg/L			08/25/22 10:24	1
Dichlorodifluoromethane	<0.00100	U	0.00100	0.000919 mg/L			08/25/22 10:24	1
1,1-Dichloroethane	<0.00100	U	0.00100	0.000635 mg/L			08/25/22 10:24	1
1,2-Dichloroethane	<0.00100	U	0.00100	0.000590 mg/L			08/25/22 10:24	1
1,1-Dichloroethene	<0.00100	U	0.00100	0.000738 mg/L			08/25/22 10:24	1
1,2-Dichloropropane	<0.00500	U	0.00500	0.000667 mg/L			08/25/22 10:24	1
1,3-Dichloropropane	<0.00500	U	0.00500	0.000514 mg/L			08/25/22 10:24	1
2,2-Dichloropropane	<0.00500	U	0.00500	0.000780 mg/L			08/25/22 10:24	1
1,1-Dichloropropene	<0.00500	U	0.00500	0.00160 mg/L			08/25/22 10:24	1
Ethylbenzene	<0.00100	U	0.00100	0.000411 mg/L			08/25/22 10:24	1
Hexachlorobutadiene	<0.00500	U	0.00500	0.00126 mg/L			08/25/22 10:24	1
Isopropylbenzene	<0.00100	U	0.00100	0.000613 mg/L			08/25/22 10:24	1
Methylene Chloride	<0.00500	U	0.00500	0.00173 mg/L			08/25/22 10:24	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124 mg/L			08/25/22 10:24	1
MTBE	<0.00500	U	0.00500	0.00139 mg/L			08/25/22 10:24	1
Naphthalene	<0.0100	U	0.0100	0.00135 mg/L			08/25/22 10:24	1
n-Butylbenzene	<0.00100	U	0.00100	0.000644 mg/L			08/25/22 10:24	1
N-Propylbenzene	<0.00100	U	0.00100	0.000498 mg/L			08/25/22 10:24	1
o-Xylene	<0.00100	U	0.00100	0.000551 mg/L			08/25/22 10:24	1
p-Cymene (p-Isopropyltoluene)	<0.00100	U	0.00100	0.000919 mg/L			08/25/22 10:24	1
sec-Butylbenzene	<0.00100	U	0.00100	0.000468 mg/L			08/25/22 10:24	1
Styrene	<0.00100	U	0.00100	0.000655 mg/L			08/25/22 10:24	1
tert-Butylbenzene	<0.00100	U	0.00100	0.000442 mg/L			08/25/22 10:24	1
1,1,1,2-Tetrachloroethane	<0.00100	U	0.00100	0.000644 mg/L			08/25/22 10:24	1
1,1,1,2,2-Tetrachloroethane	<0.00100	U	0.00100	0.000470 mg/L			08/25/22 10:24	1
Tetrachloroethene	<0.00100	U	0.00100	0.000801 mg/L			08/25/22 10:24	1
Toluene	<0.00100	U	0.00100	0.000475 mg/L			08/25/22 10:24	1

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QC Sample Results

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

Job ID: 890-2836-1

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

Lab Sample ID: MB 860-66490/10

Matrix: Water

Analysis Batch: 66490

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	<0.00100	U	0.00100	0.000945 mg/L			08/25/22 10:24	1
trans-1,3-Dichloropropene	<0.00500	U	0.00500	0.00127 mg/L			08/25/22 10:24	1
1,2,3-Trichlorobenzene	<0.00500	U	0.00500	0.00217 mg/L			08/25/22 10:24	1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500	0.00175 mg/L			08/25/22 10:24	1
1,1,1-Trichloroethane	<0.00500	U	0.00500	0.00169 mg/L			08/25/22 10:24	1
1,1,2-Trichloroethane	<0.00100	U	0.00100	0.000511 mg/L			08/25/22 10:24	1
Trichloroethene	<0.00500	U	0.00500	0.000791 mg/L			08/25/22 10:24	1
Trichlorofluoromethane	<0.00100	U	0.00100	0.000638 mg/L			08/25/22 10:24	1
1,2,3-Trichloropropane	<0.00100	U	0.00100	0.000490 mg/L			08/25/22 10:24	1
1,2,4-Trimethylbenzene	<0.00100	U	0.00100	0.000417 mg/L			08/25/22 10:24	1
1,3,5-Trimethylbenzene	<0.00100	U	0.00100	0.000456 mg/L			08/25/22 10:24	1
Vinyl chloride	<0.00200	U	0.00200	0.000638 mg/L			08/25/22 10:24	1
Xylenes, Total	<0.0100	U	0.0100	0.00124 mg/L			08/25/22 10:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		74 - 124		08/25/22 10:24	1
Dibromofluoromethane (Surr)	101		75 - 131		08/25/22 10:24	1
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		08/25/22 10:24	1
Toluene-d8 (Surr)	99		80 - 117		08/25/22 10:24	1

Lab Sample ID: LCS 860-66490/3

Matrix: Water

Analysis Batch: 66490

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	0.05124		mg/L		102	66 - 142
Bromobenzene	0.0500	0.05212		mg/L		104	75 - 125
Bromochloromethane	0.0500	0.05207		mg/L		104	60 - 140
Bromodichloromethane	0.0500	0.05382		mg/L		108	75 - 125
Bromoform	0.0500	0.05416		mg/L		108	75 - 125
Bromomethane	0.0500	0.04877		mg/L		98	60 - 140
2-Butanone	0.250	0.2325		mg/L		93	60 - 140
Carbon tetrachloride	0.0500	0.05228		mg/L		105	62 - 125
Chlorobenzene	0.0500	0.05236		mg/L		105	60 - 133
Chloroethane	0.0500	0.04355		mg/L		87	60 - 140
Chloroform	0.0500	0.05193		mg/L		104	70 - 130
Chloromethane	0.0500	0.03825		mg/L		77	60 - 140
2-Chlorotoluene	0.0500	0.05250		mg/L		105	73 - 125
4-Chlorotoluene	0.0500	0.05376		mg/L		108	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05044		mg/L		101	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05224		mg/L		104	74 - 125
Dibromochloromethane	0.0500	0.05360		mg/L		107	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05195		mg/L		104	59 - 125
1,2-Dibromoethane	0.0500	0.05065		mg/L		101	73 - 125
1,2-Dichlorobenzene	0.0500	0.05307		mg/L		106	75 - 125
1,3-Dichlorobenzene	0.0500	0.05344		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05420		mg/L		108	75 - 125
Dichlorodifluoromethane	0.0500	0.03511		mg/L		70	70 - 130

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QC Sample Results

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

Job ID: 890-2836-1

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

Lab Sample ID: LCS 860-66490/3

Matrix: Water

Analysis Batch: 66490

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	0.04714		mg/L		94	72 - 125
1,2-Dichloroethane	0.0500	0.05163		mg/L		103	68 - 127
1,1-Dichloroethene	0.0500	0.04860		mg/L		97	59 - 172
1,2-Dichloropropane	0.0500	0.04995		mg/L		100	74 - 125
1,3-Dichloropropane	0.0500	0.04999		mg/L		100	75 - 125
2,2-Dichloropropane	0.0500	0.05299		mg/L		106	75 - 125
1,1-Dichloropropene	0.0500	0.05152		mg/L		103	75 - 125
Ethylbenzene	0.0500	0.05325		mg/L		107	75 - 125
Hexachlorobutadiene	0.0500	0.05154		mg/L		103	75 - 125
Isopropylbenzene	0.0500	0.05316		mg/L		106	75 - 125
Methylene Chloride	0.0500	0.04428		mg/L		89	75 - 125
m,p-Xylenes	0.0500	0.05301		mg/L		106	75 - 125
MTBE	0.0500	0.04427		mg/L		89	65 - 135
Naphthalene	0.0500	0.05373		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05590		mg/L		112	75 - 125
N-Propylbenzene	0.0500	0.05374		mg/L		107	75 - 125
o-Xylene	0.0500	0.05308		mg/L		106	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05523		mg/L		110	75 - 125
sec-Butylbenzene	0.0500	0.05406		mg/L		108	75 - 125
Styrene	0.0500	0.05467		mg/L		109	75 - 125
tert-Butylbenzene	0.0500	0.05234		mg/L		105	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05207		mg/L		104	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05001		mg/L		100	74 - 125
Tetrachloroethene	0.0500	0.05394		mg/L		108	71 - 125
Toluene	0.0500	0.05160		mg/L		103	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04917		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05262		mg/L		105	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05338		mg/L		107	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05585		mg/L		112	75 - 135
1,1,1-Trichloroethane	0.0500	0.05087		mg/L		102	75 - 125
1,1,2-Trichloroethane	0.0500	0.04944		mg/L		99	75 - 127
Trichloroethene	0.0500	0.05410		mg/L		108	62 - 137
Trichlorofluoromethane	0.0500	0.04905		mg/L		98	60 - 140
1,2,3-Trichloropropane	0.0500	0.04627		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05420		mg/L		108	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05482		mg/L		110	60 - 140
Vinyl chloride	0.0500	0.04202		mg/L		84	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	102		75 - 131
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
Toluene-d8 (Surr)	98		80 - 117

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QC Sample Results

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

Job ID: 890-2836-1

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

Lab Sample ID: LCSD 860-66490/4

Matrix: Water

Analysis Batch: 66490

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	0.05306		mg/L		106	66 - 142	3	25
Bromobenzene	0.0500	0.05305		mg/L		106	75 - 125	2	25
Bromochloromethane	0.0500	0.05392		mg/L		108	60 - 140	3	25
Bromodichloromethane	0.0500	0.05533		mg/L		111	75 - 125	3	25
Bromoform	0.0500	0.05677		mg/L		114	75 - 125	5	25
Bromomethane	0.0500	0.04814		mg/L		96	60 - 140	1	25
2-Butanone	0.250	0.2393		mg/L		96	60 - 140	3	25
Carbon tetrachloride	0.0500	0.05453		mg/L		109	62 - 125	4	25
Chlorobenzene	0.0500	0.05262		mg/L		105	60 - 133	0	25
Chloroethane	0.0500	0.04367		mg/L		87	60 - 140	0	25
Chloroform	0.0500	0.05424		mg/L		108	70 - 130	4	25
Chloromethane	0.0500	0.03836		mg/L		77	60 - 140	0	25
2-Chlorotoluene	0.0500	0.05323		mg/L		106	73 - 125	1	25
4-Chlorotoluene	0.0500	0.05381		mg/L		108	74 - 125	0	25
cis-1,2-Dichloroethene	0.0500	0.05294		mg/L		106	75 - 125	5	25
cis-1,3-Dichloropropene	0.0500	0.05391		mg/L		108	74 - 125	3	25
Dibromochloromethane	0.0500	0.05487		mg/L		110	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05622		mg/L		112	59 - 125	8	25
1,2-Dibromoethane	0.0500	0.05378		mg/L		108	73 - 125	6	25
1,2-Dichlorobenzene	0.0500	0.05373		mg/L		107	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.05537		mg/L		111	75 - 125	4	25
1,4-Dichlorobenzene	0.0500	0.05394		mg/L		108	75 - 125	0	25
Dichlorodifluoromethane	0.0500	0.03610		mg/L		72	70 - 130	3	25
1,1-Dichloroethane	0.0500	0.04916		mg/L		98	72 - 125	4	25
1,2-Dichloroethane	0.0500	0.05399		mg/L		108	68 - 127	4	25
1,1-Dichloroethene	0.0500	0.05071		mg/L		101	59 - 172	4	25
1,2-Dichloropropane	0.0500	0.05214		mg/L		104	74 - 125	4	25
1,3-Dichloropropane	0.0500	0.04990		mg/L		100	75 - 125	0	25
2,2-Dichloropropane	0.0500	0.05430		mg/L		109	75 - 125	2	25
1,1-Dichloropropene	0.0500	0.05308		mg/L		106	75 - 125	3	25
Ethylbenzene	0.0500	0.05412		mg/L		108	75 - 125	2	25
Hexachlorobutadiene	0.0500	0.05629		mg/L		113	75 - 125	9	25
Isopropylbenzene	0.0500	0.05457		mg/L		109	75 - 125	3	25
Methylene Chloride	0.0500	0.04724		mg/L		94	75 - 125	6	25
m,p-Xylenes	0.0500	0.05375		mg/L		107	75 - 125	1	25
MTBE	0.0500	0.04659		mg/L		93	65 - 135	5	25
Naphthalene	0.0500	0.06134		mg/L		123	70 - 130	13	25
n-Butylbenzene	0.0500	0.05829		mg/L		117	75 - 125	4	25
N-Propylbenzene	0.0500	0.05449		mg/L		109	75 - 125	1	25
o-Xylene	0.0500	0.05389		mg/L		108	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05695		mg/L		114	75 - 125	3	25
sec-Butylbenzene	0.0500	0.05569		mg/L		111	75 - 125	3	25
Styrene	0.0500	0.05537		mg/L		111	75 - 125	1	25
tert-Butylbenzene	0.0500	0.05391		mg/L		108	75 - 125	3	25
1,1,1,2-Tetrachloroethane	0.0500	0.05306		mg/L		106	72 - 125	2	25
1,1,2,2-Tetrachloroethane	0.0500	0.05250		mg/L		105	74 - 125	5	25
Tetrachloroethene	0.0500	0.05581		mg/L		112	71 - 125	3	25
Toluene	0.0500	0.05223		mg/L		104	59 - 139	1	25

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QC Sample Results

Client: Ensolum

Job ID: 890-2836-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-66490/4

Matrix: Water

Analysis Batch: 66490

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	0.05228		mg/L		105	75 - 125	6	25
trans-1,3-Dichloropropene	0.0500	0.05410		mg/L		108	66 - 125	3	25
1,2,3-Trichlorobenzene	0.0500	0.06113		mg/L		122	75 - 137	14	25
1,2,4-Trichlorobenzene	0.0500	0.05958		mg/L		119	75 - 135	6	25
1,1,1-Trichloroethane	0.0500	0.05289		mg/L		106	75 - 125	4	25
1,1,2-Trichloroethane	0.0500	0.05154		mg/L		103	75 - 127	4	25
Trichloroethene	0.0500	0.05604		mg/L		112	62 - 137	4	25
Trichlorofluoromethane	0.0500	0.04928		mg/L		99	60 - 140	0	25
1,2,3-Trichloropropane	0.0500	0.05051		mg/L		101	75 - 125	9	25
1,2,4-Trimethylbenzene	0.0500	0.05474		mg/L		109	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.05500		mg/L		110	60 - 140	0	25
Vinyl chloride	0.0500	0.04201		mg/L		84	60 - 140	0	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	104		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	98		80 - 117

Lab Sample ID: 860-31961-F-15 MS

Matrix: Water

Analysis Batch: 66490

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00100	U	0.0500	0.05353		mg/L		107	66 - 142
Bromobenzene	<0.00100	U	0.0500	0.05578		mg/L		112	75 - 125
Bromochloromethane	<0.00100	U	0.0500	0.05437		mg/L		109	60 - 140
Bromodichloromethane	<0.00100	U	0.0500	0.05593		mg/L		112	75 - 125
Bromoform	<0.00500	U	0.0500	0.05773		mg/L		115	75 - 125
Bromomethane	<0.00500	U	0.0500	0.04962		mg/L		99	60 - 140
2-Butanone	<0.0500	U	0.250	0.2425		mg/L		97	60 - 140
Carbon tetrachloride	<0.00500	U	0.0500	0.05541		mg/L		111	62 - 125
Chlorobenzene	<0.00100	U	0.0500	0.05552		mg/L		111	60 - 133
Chloroethane	<0.0100	U	0.0500	0.04587		mg/L		92	60 - 140
Chloroform	<0.00100	U	0.0500	0.05405		mg/L		108	70 - 130
Chloromethane	<0.0100	U	0.0500	0.03805		mg/L		76	60 - 140
2-Chlorotoluene	<0.00200	U	0.0500	0.05624		mg/L		112	73 - 125
4-Chlorotoluene	<0.00100	U	0.0500	0.05725		mg/L		115	74 - 125
cis-1,2-Dichloroethene	<0.00100	U	0.0500	0.05254		mg/L		105	75 - 125
cis-1,3-Dichloropropene	<0.00500	U	0.0500	0.05505		mg/L		110	74 - 125
Dibromochloromethane	<0.00500	U	0.0500	0.05792		mg/L		116	73 - 125
1,2-Dibromo-3-Chloropropane	<0.00500	U	0.0500	0.05894		mg/L		118	59 - 125
1,2-Dibromoethane	<0.00500	U	0.0500	0.05566		mg/L		111	73 - 125
1,2-Dichlorobenzene	<0.00100	U	0.0500	0.05735		mg/L		115	75 - 125
1,3-Dichlorobenzene	<0.00100	U	0.0500	0.05741		mg/L		115	75 - 125
1,4-Dichlorobenzene	<0.00100	U	0.0500	0.05735		mg/L		115	75 - 125
Dichlorodifluoromethane	<0.00100	U F1	0.0500	0.03351	F1	mg/L		67	70 - 130
1,1-Dichloroethane	<0.00100	U	0.0500	0.04957		mg/L		99	72 - 125

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QC Sample Results

Client: Ensolum

Job ID: 890-2836-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: 860-31961-F-15 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 66490

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	<0.00100	U	0.0500	0.05399		mg/L		108	68 - 127
1,1-Dichloroethene	<0.00100	U	0.0500	0.05110		mg/L		102	59 - 172
1,2-Dichloropropane	<0.00500	U	0.0500	0.05327		mg/L		107	74 - 125
1,3-Dichloropropane	<0.00500	U	0.0500	0.05162		mg/L		103	75 - 125
2,2-Dichloropropane	<0.00500	U	0.0500	0.05624		mg/L		112	75 - 125
1,1-Dichloropropene	<0.00500	U	0.0500	0.05390		mg/L		108	75 - 125
Ethylbenzene	<0.00100	U	0.0500	0.05747		mg/L		115	75 - 125
Hexachlorobutadiene	<0.00500	U	0.0500	0.05960		mg/L		119	75 - 125
Isopropylbenzene	<0.00100	U	0.0500	0.05807		mg/L		116	75 - 125
Methylene Chloride	<0.00500	U	0.0500	0.04494		mg/L		90	75 - 125
m,p-Xylenes	<0.0100	U	0.0500	0.05729		mg/L		115	75 - 125
MTBE	<0.00500	U	0.0500	0.04664		mg/L		93	65 - 135
Naphthalene	<0.0100	U	0.0500	0.06263		mg/L		125	70 - 130
n-Butylbenzene	<0.00100	U	0.0500	0.06157		mg/L		123	75 - 125
N-Propylbenzene	<0.00100	U	0.0500	0.05804		mg/L		116	75 - 125
o-Xylene	<0.00100	U	0.0500	0.05718		mg/L		114	75 - 125
p-Cymene (p-Isopropyltoluene)	<0.00100	U	0.0500	0.06062		mg/L		121	75 - 125
sec-Butylbenzene	<0.00100	U	0.0500	0.05924		mg/L		118	75 - 125
Styrene	<0.00100	U	0.0500	0.05851		mg/L		117	75 - 125
tert-Butylbenzene	<0.00100	U	0.0500	0.05678		mg/L		114	75 - 125
1,1,1,2-Tetrachloroethane	<0.00100	U	0.0500	0.05549		mg/L		111	72 - 125
1,1,2,2-Tetrachloroethane	<0.00100	U	0.0500	0.05434		mg/L		109	74 - 125
Tetrachloroethene	<0.00100	U	0.0500	0.05877		mg/L		118	71 - 125
Toluene	<0.00100	U	0.0500	0.05477		mg/L		110	59 - 139
trans-1,2-Dichloroethene	<0.00100	U	0.0500	0.05136		mg/L		103	75 - 125
trans-1,3-Dichloropropene	<0.00500	U	0.0500	0.05684		mg/L		114	66 - 125
1,2,3-Trichlorobenzene	<0.00500	U	0.0500	0.06240		mg/L		125	75 - 137
1,2,4-Trichlorobenzene	<0.00500	U	0.0500	0.06200		mg/L		124	75 - 135
1,1,1-Trichloroethane	<0.00500	U	0.0500	0.05238		mg/L		105	75 - 125
1,1,2-Trichloroethane	<0.00100	U	0.0500	0.05257		mg/L		105	75 - 127
Trichloroethene	<0.00500	U	0.0500	0.05618		mg/L		112	62 - 137
Trichlorofluoromethane	<0.00100	U	0.0500	0.05418		mg/L		108	60 - 140
1,2,3-Trichloropropane	<0.00100	U	0.0500	0.04907		mg/L		98	75 - 125
1,2,4-Trimethylbenzene	<0.00100	U	0.0500	0.05825		mg/L		117	75 - 125
1,3,5-Trimethylbenzene	<0.00100	U	0.0500	0.05803		mg/L		116	70 - 125
Vinyl chloride	<0.00200	U	0.0500	0.04366		mg/L		87	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
1,2-Dichloroethane-d4 (Surr)	97		63 - 144
Toluene-d8 (Surr)	99		80 - 117

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QC Sample Results

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

Job ID: 890-2836-1

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

Lab Sample ID: MB 860-66749/1-A

Matrix: Water

Analysis Batch: 66724

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66749

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<5.00	U	5.00	0.988 mg/L		08/26/22 11:32	08/26/22 13:32	1
Diesel Range Organics (Over C10-C28)	<5.00	U	5.00	0.988 mg/L		08/26/22 11:32	08/26/22 13:32	1
Oil Range Organics (Over C28-C36)	<5.00	U	5.00	0.954 mg/L		08/26/22 11:32	08/26/22 13:32	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 135			08/26/22 11:32	08/26/22 13:32	1
o-Terphenyl	120		70 - 135			08/26/22 11:32	08/26/22 13:32	1

Lab Sample ID: LCS 860-66749/2-A

Matrix: Water

Analysis Batch: 66724

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66749

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	99.8	114.4		mg/L		115	70 - 135	
Diesel Range Organics (Over C10-C28)	100	95.21		mg/L		95	70 - 135	
Surrogate	%Recovery	LCS Qualifier	Limits					
1-Chlorooctane	107		70 - 135					
o-Terphenyl	92		70 - 135					

Lab Sample ID: LCSD 860-66749/3-A

Matrix: Water

Analysis Batch: 66724

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 66749

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.8	120.7		mg/L		121	70 - 135	5	35
Diesel Range Organics (Over C10-C28)	100	107.2		mg/L		107	70 - 135	12	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	112		70 - 135						
o-Terphenyl	102		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-66578/3

Matrix: Water

Analysis Batch: 66578

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.200 mg/L			08/25/22 13:50	1
Fluoride	<0.500	U	0.500	0.100 mg/L			08/25/22 13:50	1
Sulfate	<0.500	U	0.500	0.109 mg/L			08/25/22 13:50	1

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QC Sample Results

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

Job ID: 890-2836-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-66578/6

Matrix: Water

Analysis Batch: 66578

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	10.54		mg/L		105	90 - 110
Fluoride	10.0	10.64		mg/L		106	90 - 110
Sulfate	10.0	10.56		mg/L		106	90 - 110

Lab Sample ID: LCSD 860-66578/7

Matrix: Water

Analysis Batch: 66578

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	10.54		mg/L		105	90 - 110	0	20
Fluoride	10.0	10.66		mg/L		107	90 - 110	0	20
Sulfate	10.0	10.58		mg/L		106	90 - 110	0	20

Lab Sample ID: LLCS 860-66578/5

Matrix: Water

Analysis Batch: 66578

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	0.5535		mg/L		111	50 - 150
Fluoride	0.500	0.5380		mg/L		108	50 - 150
Sulfate	0.500	0.5349		mg/L		107	50 - 150

Lab Sample ID: 820-5507-E-1 MS

Matrix: Water

Analysis Batch: 66578

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	219		10.0	225.5	4	mg/L		67	90 - 110
Fluoride	5.09		10.0	14.12		mg/L		90	90 - 110
Sulfate	350		10.0	353.8	4	mg/L		35	90 - 110

Lab Sample ID: 820-5507-E-1 MSD

Matrix: Water

Analysis Batch: 66578

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	219		10.0	226.0	4	mg/L		72	90 - 110	0	20
Fluoride	5.09		10.0	14.19		mg/L		91	90 - 110	0	20
Sulfate	350		10.0	354.6	4	mg/L		43	90 - 110	0	20

Lab Sample ID: MB 860-66579/3

Matrix: Water

Analysis Batch: 66579

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.100	U	0.100	0.0391 mg/L			08/25/22 13:50	1
Nitrite as N	0.03275	J	0.100	0.0293 mg/L			08/25/22 13:50	1

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QC Sample Results

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

Job ID: 890-2836-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-66579/6

Matrix: Water

Analysis Batch: 66579

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	10.66		mg/L		107	80 - 120
Nitrite as N	5.00	5.131		mg/L		103	80 - 120

Lab Sample ID: LCSD 860-66579/7

Matrix: Water

Analysis Batch: 66579

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	10.69		mg/L		107	80 - 120	0	20
Nitrite as N	5.00	5.139		mg/L		103	80 - 120	0	20

Lab Sample ID: LLCS 860-66579/4

Matrix: Water

Analysis Batch: 66579

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	0.1017		mg/L		102	50 - 150
Nitrite as N	0.100	0.1021		mg/L		102	50 - 150

Lab Sample ID: 820-5507-E-1 MS

Matrix: Water

Analysis Batch: 66579

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	6.63		10.0	17.48		mg/L		108	80 - 120
Nitrite as N	<0.100	U	2.50	2.020		mg/L		81	80 - 120

Lab Sample ID: 820-5507-E-1 MSD

Matrix: Water

Analysis Batch: 66579

Client Sample ID: Matrix Spike Duplicate

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	6.63		10.0	17.52		mg/L		109	80 - 120	0	15
Nitrite as N	<0.100	U	2.50	2.026		mg/L		81	80 - 120	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-66827/4

Matrix: Water

Analysis Batch: 66827

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			08/26/22 11:35	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/26/22 11:35	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			08/26/22 11:35	1

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QC Sample Results

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

Job ID: 890-2836-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 860-66827/5

Matrix: Water

Analysis Batch: 66827

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	252.3		mg/L		101	85 - 115

Lab Sample ID: LCSD 860-66827/6

Matrix: Water

Analysis Batch: 66827

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	251.5		mg/L		101	85 - 115	0	20

Lab Sample ID: 890-2835-C-1 DU

Matrix: Water

Analysis Batch: 66827

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	728		727.4		mg/L		0.1	20
Bicarbonate Alkalinity as CaCO ₃	728		727.4		mg/L		0.1	20
Carbonate Alkalinity as CaCO ₃	<4.00	U	<4.00	U	mg/L		NC	20

Method: SM 4500 H+ B - pH

Lab Sample ID: 820-5481-A-2 DU

Matrix: Water

Analysis Batch: 66765

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	5.8		5.8		SU		0.3	20
Temperature	16.1		16.6		Degrees C		3	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-66837/8

Matrix: Water

Analysis Batch: 66837

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<5.00	U	5.00	0.495 mg/L			08/26/22 17:24	1

Lab Sample ID: LCS 860-66837/9

Matrix: Water

Analysis Batch: 66837

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	45.60		mg/L		91	80 - 120

Lab Sample ID: LCSD 860-66837/10

Matrix: Water

Analysis Batch: 66837

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	45.40		mg/L		91	80 - 120	0	20

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QC Sample Results

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

Job ID: 890-2836-1

Method: SM 4500 S2 F - Sulfide, Total (Continued)

Lab Sample ID: 890-2836-1 MS

Matrix: Water

Analysis Batch: 66837

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
Sulfide	1.40	J	50.0	47.40		mg/L		92	80 - 120

Lab Sample ID: 890-2836-1 MSD

Matrix: Water

Analysis Batch: 66837

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
Sulfide	1.40	J	50.0	47.40		mg/L		92	80 - 120	0	20

QC Association Summary

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

Job ID: 890-2836-1

GC/MS VOA

Analysis Batch: 66490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	8260C	
890-2836-2	MW-1	Total/NA	Water	8260C	
MB 860-66490/10	Method Blank	Total/NA	Water	8260C	
LCS 860-66490/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-66490/4	Lab Control Sample Dup	Total/NA	Water	8260C	
860-31961-F-15 MS	Matrix Spike	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 64807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	8015 NM	
890-2836-2	MW-1	Total/NA	Water	8015 NM	

Analysis Batch: 66724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	8015B NM	66749
890-2836-2	MW-1	Total/NA	Water	8015B NM	66749
MB 860-66749/1-A	Method Blank	Total/NA	Water	8015B NM	66749
LCS 860-66749/2-A	Lab Control Sample	Total/NA	Water	8015B NM	66749
LCSD 860-66749/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	66749

Prep Batch: 66749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	8015NM Aq Prep	
890-2836-2	MW-1	Total/NA	Water	8015NM Aq Prep	
MB 860-66749/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-66749/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-66749/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 66578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	300.0	
890-2836-2	MW-1	Total/NA	Water	300.0	
MB 860-66578/3	Method Blank	Total/NA	Water	300.0	
LCS 860-66578/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-66578/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-66578/5	Lab Control Sample	Total/NA	Water	300.0	
820-5507-E-1 MS	Matrix Spike	Total/NA	Water	300.0	
820-5507-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 66579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	300.0	
890-2836-2	MW-1	Total/NA	Water	300.0	
MB 860-66579/3	Method Blank	Total/NA	Water	300.0	
LCS 860-66579/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-66579/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-66579/4	Lab Control Sample	Total/NA	Water	300.0	
820-5507-E-1 MS	Matrix Spike	Total/NA	Water	300.0	

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QC Association Summary

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

Job ID: 890-2836-1

HPLC/IC (Continued)

Analysis Batch: 66579 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-5507-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 66765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	SM 4500 H+ B	
890-2836-2	MW-1	Total/NA	Water	SM 4500 H+ B	
820-5481-A-2 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 66827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	SM 2320B	
890-2836-2	MW-1	Total/NA	Water	SM 2320B	
MB 860-66827/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-66827/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-66827/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
890-2835-C-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 66837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	SM 4500 S2 F	
890-2836-2	MW-1	Total/NA	Water	SM 4500 S2 F	
MB 860-66837/8	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-66837/9	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-66837/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
890-2836-1 MS	MW-2	Total/NA	Water	SM 4500 S2 F	
890-2836-1 MSD	MW-2	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 67782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2836-1	MW-2	Total/NA	Water	SM 4500 CO2 D	
890-2836-2	MW-1	Total/NA	Water	SM 4500 CO2 D	

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Lab Chronicle

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

Job ID: 890-2836-1

Client Sample ID: MW-2

Date Collected: 08/24/22 10:30

Date Received: 08/24/22 13:09

Lab Sample ID: 890-2836-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	66490	08/25/22 17:34	NA	EET HOU
Total/NA	Analysis	8015 NM		1			64807	08/26/22 15:59	MC	EET HOU
Total/NA	Prep	8015NM Aq Prep			31.4 mL	3 mL	66749	08/26/22 11:32	SAR	EET HOU
Total/NA	Analysis	8015B NM		1	0 mL	0 mL	66724	08/26/22 13:52	SAR	EET HOU
Total/NA	Analysis	300.0		1			66578	08/25/22 19:02	A1S	EET HOU
Total/NA	Analysis	300.0		1			66579	08/25/22 19:02	A1S	EET HOU
Total/NA	Analysis	SM 2320B		1			66827	08/26/22 12:26	TL	EET HOU
Total/NA	Analysis	SM 4500 CO2 D		1			67782	09/02/22 16:50	AA	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			66765	08/26/22 12:59	TL	EET HOU
Total/NA	Analysis	SM 4500 S2 F		1	200 mL	200 mL	66837	08/26/22 17:24	YGG	EET HOU

Client Sample ID: MW-1

Date Collected: 08/24/22 11:25

Date Received: 08/24/22 13:09

Lab Sample ID: 890-2836-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	66490	08/25/22 17:14	NA	EET HOU
Total/NA	Analysis	8015 NM		1			64807	08/26/22 15:59	MC	EET HOU
Total/NA	Prep	8015NM Aq Prep			32.4 mL	3 mL	66749	08/26/22 11:32	SAR	EET HOU
Total/NA	Analysis	8015B NM		1	0 mL	0 mL	66724	08/26/22 15:10	SAR	EET HOU
Total/NA	Analysis	300.0		1			66578	08/25/22 19:37	A1S	EET HOU
Total/NA	Analysis	300.0		1			66579	08/25/22 19:37	A1S	EET HOU
Total/NA	Analysis	SM 2320B		1			66827	08/26/22 12:42	TL	EET HOU
Total/NA	Analysis	SM 4500 CO2 D		1			67782	09/02/22 16:50	AA	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			66765	08/26/22 13:01	TL	EET HOU
Total/NA	Analysis	SM 4500 S2 F		1	200 mL	200 mL	66837	08/26/22 17:24	YGG	EET HOU

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum

Job ID: 890-2836-1

Project/Site: South Hobbs - 03B1417002

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-04-22 *
Florida	NELAP	E871002	06-30-23
Louisiana	NELAP	03054	06-30-23
Oklahoma	State	2021-168	08-31-22 *
Texas	NELAP	T104704215-22-47	06-30-23
Texas	TCEQ Water Supply	T104704215	12-31-22
USDA	US Federal Programs	P330-22-00025	03-02-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Carlsbad

Method Summary

Client: Ensolum

Job ID: 890-2836-1

Project/Site: South Hobbs - 03B1417002

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

Eurofins Carlsbad

Sample Summary

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

Job ID: 890-2836-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2836-1	MW-2	Water	08/24/22 10:30	08/24/22 13:09
890-2836-2	MW-1	Water	08/24/22 11:25	08/24/22 13:09

- 1
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- 3
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- 14



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 (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Beaux Jennings	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Wadley #210	Address:	
City, State ZIP:	Midland TX	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: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV	
Deliverables: ☐ EDD ☐ ADAPT ☐ Other:	

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

SAMPLE RECEIPT	Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	1.0/0.8	Thermometer ID		
Received Inlet:	☒ Yes ☐ No	Correction Factor:		
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:		
Sample Custody Seals:	☒ Yes ☐ No			

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	Sample Comments
MW-1	GW	8-24-22	1030	-	7	X	X	X	X	X	X	24 Hr.
MW-2	GW	8-24-22	1125	-	7	X	X	X	X	X	X	
Nil B-24-22												



890-2836 Chain of Custody

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

Sample Comments

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	TCCLP / 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)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8-24-22 1309			

Eurofins Carlsbad

1089 N Canal St.

Carlsbad, NM 88220

Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

Environment Testing
America

Client Information (Sub Contract Lab)		Sampler: Lab PM: Kramer Jessica		Carrier Tracking No(s): 890-896-1		COC No: 890-896-1	
Client Contact: Shipping/Receiving		Phone: Jessica.Kramer@et.eurofins.com		State of Origin: New Mexico		Page: Page 1 of 1	
Company: Eurofins Environment Testing South Central		Accreditations Required (See note): NELAP Texas		Job #: 890-2836-1		Preservation Codes: 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 Na2SO3 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 Other: Z other (specify)	
Due Date Requested: 8/30/2022		TAT Requested (days):		Analysis Requested			
Address: 4145 Greenbriar Dr		City: Stafford		8016MOD_NM/8016NM_Aq_Prep Full TPH			
State, Zip: TX, 77477		PO #: 281-240-4200(Tel)		8016MOD_Calo			
Email: 281-240-4200(Tel)		WO #: 88000023		8260C/8030C (MOD) Full List VOCs			
Project Name: South Hobbs 03B1417002		SSOW#: 88000023		SM4500_S2_F/Sulfide, Total			
Site: South Hobbs				SM4500_H+			
				SM4500_CO2_D (MOD) Carbon Dioxide			
				8016MOD_NM/8016NM_Aq_Prep Full TPH			
				8016MOD_Calo			
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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2836-1

Login Number: 2836

List Number: 1

Creator: Kramer, Jessica

List Source: Eurofins Carlsbad

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: 890-2836-1

Login Number: 2836

List Number: 2

Creator: Rubio, Yuri

List Source: Eurofins Houston

List Creation: 08/25/22 12:28 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?	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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-18745-1

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:

9/7/2022 8:02:33 AM

Jessica Kramer, Project Manager
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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: 880-18745-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-18745-1
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
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

Case Narrative

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

Job ID: 880-18745-1
SDG: Hobbs NM

Job ID: 880-18745-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-18745-1****Receipt**

The sample was received on 8/31/2022 2:48 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 1.5°C

GC/MS VOA

Method 8260C: The matrix spike(MS) recoveries for analytical batch 860-67473 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

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 860-67609 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 analytical batch 860-67610 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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-67635 and analytical batch 860-67949 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
Project/Site: Levey Well Hobbs, NM - 03B1417001

Job ID: 880-18745-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-18745-1

Date Collected: 08/31/22 10:45

Matrix: Water

Date Received: 08/31/22 14:48

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00443		0.00100	0.000533	mg/L		09/01/22 18:32	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		09/01/22 18:32	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		09/01/22 18:32	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		09/01/22 18:32	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		09/01/22 18:32	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		09/01/22 18:32	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		09/01/22 18:32	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		09/01/22 18:32	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		09/01/22 18:32	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		09/01/22 18:32	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		09/01/22 18:32	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		09/01/22 18:32	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		09/01/22 18:32	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		09/01/22 18:32	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		09/01/22 18:32	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		09/01/22 18:32	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		09/01/22 18:32	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		09/01/22 18:32	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		09/01/22 18:32	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		09/01/22 18:32	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		09/01/22 18:32	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		09/01/22 18:32	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		09/01/22 18:32	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		09/01/22 18:32	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L		09/01/22 18:32	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L		09/01/22 18:32	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L		09/01/22 18:32	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L		09/01/22 18:32	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L		09/01/22 18:32	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L		09/01/22 18:32	1
Ethylbenzene	0.0155		0.00100	0.000411	mg/L		09/01/22 18:32	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L		09/01/22 18:32	1
Isopropylbenzene	0.00752		0.00100	0.000613	mg/L		09/01/22 18:32	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L		09/01/22 18:32	1
m,p-Xylenes	0.0632		0.0100	0.00124	mg/L		09/01/22 18:32	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L		09/01/22 18:32	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L		09/01/22 18:32	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644	mg/L		09/01/22 18:32	1
N-Propylbenzene	0.00375		0.00100	0.000498	mg/L		09/01/22 18:32	1
o-Xylene	0.00977		0.00100	0.000551	mg/L		09/01/22 18:32	1
p-Cymene (p-Isopropyltoluene)	0.00134		0.00100	0.000919	mg/L		09/01/22 18:32	1
sec-Butylbenzene	0.00179		0.00100	0.000468	mg/L		09/01/22 18:32	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L		09/01/22 18:32	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L		09/01/22 18:32	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L		09/01/22 18:32	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L		09/01/22 18:32	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L		09/01/22 18:32	1
Toluene	0.0320		0.00100	0.000475	mg/L		09/01/22 18:32	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L		09/01/22 18:32	1

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Client Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-18745-1

Date Collected: 08/31/22 10:45

Matrix: Water

Date Received: 08/31/22 14:48

Method: 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			09/01/22 18:32	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			09/01/22 18:32	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			09/01/22 18:32	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			09/01/22 18:32	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			09/01/22 18:32	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			09/01/22 18:32	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			09/01/22 18:32	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			09/01/22 18:32	1
1,2,4-Trimethylbenzene	0.0149		0.00100	0.000417 mg/L			09/01/22 18:32	1
1,3,5-Trimethylbenzene	0.00504		0.00100	0.000456 mg/L			09/01/22 18:32	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			09/01/22 18:32	1
Xylenes, Total	0.0730		0.0100	0.00124 mg/L			09/01/22 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		09/01/22 18:32	1
Dibromofluoromethane (Surr)	94		75 - 131		09/01/22 18:32	1
1,2-Dichloroethane-d4 (Surr)	102		63 - 144		09/01/22 18:32	1
Toluene-d8 (Surr)	102		80 - 117		09/01/22 18:32	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.434	J	0.500	0.0711 mg/L			09/01/22 20:49	1
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			09/01/22 20:49	1
Chloride	217		0.500	0.200 mg/L			09/01/22 20:49	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			09/01/22 20:49	1
Fluoride	0.468	J	0.500	0.100 mg/L			09/01/22 20:49	1
Sulfate	46.8		0.500	0.109 mg/L			09/01/22 20:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	253		10.0	5.76 mg/L		09/02/22 09:00	09/02/22 15:55	50
Magnesium	50.7		0.200	0.0428 mg/L		09/02/22 09:00	09/02/22 15:49	1
Potassium	4.20		0.500	0.0914 mg/L		09/02/22 09:00	09/02/22 15:49	1
Sodium	79.3		0.500	0.152 mg/L		09/02/22 09:00	09/02/22 15:49	1
SiO2	70.0		1.07	0.471 mg/L		09/02/22 09:00	09/02/22 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	-4.91			%			08/31/22 14:41	1
Alkalinity	651		4.00	4.00 mg/L			09/02/22 13:03	1
Bicarbonate Alkalinity as CaCO3	651		4.00	4.00 mg/L			09/02/22 13:03	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			09/02/22 13:03	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			09/02/22 13:03	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			09/02/22 13:03	1
Total Dissolved Solids	1270		10.0	10.0 mg/L			09/01/22 15:53	1
pH	6.9	HF		SU			09/02/22 14:15	1
Temperature	20.2	HF		Celsius			09/02/22 14:15	1

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Surrogate Summary

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

Job ID: 880-18745-1
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)
860-32340-C-4 MS	Matrix Spike	98	101	98	98
880-18745-1	Levey Well	98	94	102	102
LCS 860-67473/3	Lab Control Sample	97	99	95	96
LCSD 860-67473/4	Lab Control Sample Dup	97	98	94	98
MB 860-67473/10	Method Blank	102	94	105	102
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: 880-18745-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-67473/10

Matrix: Water

Analysis Batch: 67473

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			09/01/22 12:32	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			09/01/22 12:32	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			09/01/22 12:32	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			09/01/22 12:32	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			09/01/22 12:32	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			09/01/22 12:32	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			09/01/22 12:32	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			09/01/22 12:32	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			09/01/22 12:32	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			09/01/22 12:32	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			09/01/22 12:32	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			09/01/22 12:32	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			09/01/22 12:32	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			09/01/22 12:32	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			09/01/22 12:32	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			09/01/22 12:32	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			09/01/22 12:32	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			09/01/22 12:32	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			09/01/22 12:32	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			09/01/22 12:32	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/01/22 12:32	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/01/22 12:32	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			09/01/22 12:32	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			09/01/22 12:32	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			09/01/22 12:32	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			09/01/22 12:32	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			09/01/22 12:32	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			09/01/22 12:32	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			09/01/22 12:32	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			09/01/22 12:32	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			09/01/22 12:32	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			09/01/22 12:32	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			09/01/22 12:32	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			09/01/22 12:32	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			09/01/22 12:32	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			09/01/22 12:32	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			09/01/22 12:32	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			09/01/22 12:32	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			09/01/22 12:32	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			09/01/22 12:32	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			09/01/22 12:32	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			09/01/22 12:32	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			09/01/22 12:32	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			09/01/22 12:32	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			09/01/22 12:32	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			09/01/22 12:32	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			09/01/22 12:32	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			09/01/22 12:32	1

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QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-67473/10

Matrix: Water

Analysis Batch: 67473

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			09/01/22 12:32	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			09/01/22 12:32	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			09/01/22 12:32	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			09/01/22 12:32	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			09/01/22 12:32	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			09/01/22 12:32	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			09/01/22 12:32	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			09/01/22 12:32	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			09/01/22 12:32	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			09/01/22 12:32	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			09/01/22 12:32	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			09/01/22 12:32	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			09/01/22 12:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		09/01/22 12:32	1
Dibromofluoromethane (Surr)	94		75 - 131		09/01/22 12:32	1
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		09/01/22 12:32	1
Toluene-d8 (Surr)	102		80 - 117		09/01/22 12:32	1

Lab Sample ID: LCS 860-67473/3

Matrix: Water

Analysis Batch: 67473

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	0.04936		mg/L		99	66 - 142
Bromobenzene	0.0500	0.05436		mg/L		109	75 - 125
Bromochloromethane	0.0500	0.04663		mg/L		93	60 - 140
Bromodichloromethane	0.0500	0.04805		mg/L		96	75 - 125
Bromoform	0.0500	0.04019		mg/L		80	75 - 125
Bromomethane	0.0500	0.04642		mg/L		93	60 - 140
2-Butanone	0.250	0.2165		mg/L		87	60 - 140
Carbon tetrachloride	0.0500	0.05554		mg/L		111	62 - 125
Chlorobenzene	0.0500	0.04911		mg/L		98	60 - 133
Chloroethane	0.0500	0.05690		mg/L		114	60 - 140
Chloroform	0.0500	0.04996		mg/L		100	70 - 130
Chloromethane	0.0500	0.05375		mg/L		107	60 - 140
2-Chlorotoluene	0.0500	0.04994		mg/L		100	73 - 125
4-Chlorotoluene	0.0500	0.05368		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05046		mg/L		101	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04839		mg/L		97	74 - 125
Dibromochloromethane	0.0500	0.04389		mg/L		88	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.03936		mg/L		79	59 - 125
1,2-Dibromoethane	0.0500	0.05070		mg/L		101	73 - 125
1,2-Dichlorobenzene	0.0500	0.05259		mg/L		105	75 - 125
1,3-Dichlorobenzene	0.0500	0.04893		mg/L		98	75 - 125
1,4-Dichlorobenzene	0.0500	0.05360		mg/L		107	75 - 125
Dichlorodifluoromethane	0.0500	0.06161		mg/L		123	70 - 130

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QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-67473/3

Matrix: Water

Analysis Batch: 67473

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	0.04889		mg/L		98	72 - 125
1,2-Dichloroethane	0.0500	0.05348		mg/L		107	68 - 127
1,1-Dichloroethene	0.0500	0.04817		mg/L		96	59 - 172
1,2-Dichloropropane	0.0500	0.04919		mg/L		98	74 - 125
1,3-Dichloropropane	0.0500	0.05001		mg/L		100	75 - 125
2,2-Dichloropropane	0.0500	0.05110		mg/L		102	75 - 125
1,1-Dichloropropene	0.0500	0.04997		mg/L		100	75 - 125
Ethylbenzene	0.0500	0.04969		mg/L		99	75 - 125
Hexachlorobutadiene	0.0500	0.05163		mg/L		103	75 - 125
Isopropylbenzene	0.0500	0.04904		mg/L		98	75 - 125
Methylene Chloride	0.0500	0.04962		mg/L		99	75 - 125
m,p-Xylenes	0.0500	0.05088		mg/L		102	75 - 125
MTBE	0.0500	0.05065		mg/L		101	65 - 135
Naphthalene	0.0500	0.04368		mg/L		87	70 - 130
n-Butylbenzene	0.0500	0.04920		mg/L		98	75 - 125
N-Propylbenzene	0.0500	0.05097		mg/L		102	75 - 125
o-Xylene	0.0500	0.04838		mg/L		97	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.04902		mg/L		98	75 - 125
sec-Butylbenzene	0.0500	0.04984		mg/L		100	75 - 125
Styrene	0.0500	0.04673		mg/L		93	75 - 125
tert-Butylbenzene	0.0500	0.04938		mg/L		99	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04696		mg/L		94	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04553		mg/L		91	74 - 125
Tetrachloroethene	0.0500	0.04913		mg/L		98	71 - 125
Toluene	0.0500	0.04861		mg/L		97	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04889		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04695		mg/L		94	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04664		mg/L		93	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04611		mg/L		92	75 - 135
1,1,1-Trichloroethane	0.0500	0.05078		mg/L		102	75 - 125
1,1,2-Trichloroethane	0.0500	0.05027		mg/L		101	75 - 127
Trichloroethene	0.0500	0.04988		mg/L		100	62 - 137
Trichlorofluoromethane	0.0500	0.06145		mg/L		123	60 - 140
1,2,3-Trichloropropane	0.0500	0.04666		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04834		mg/L		97	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04878		mg/L		98	60 - 140
Vinyl chloride	0.0500	0.05678		mg/L		114	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	95		63 - 144
Toluene-d8 (Surr)	96		80 - 117

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QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-67473/4

Matrix: Water

Analysis Batch: 67473

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	0.04695		mg/L		94	66 - 142	5	25
Bromobenzene	0.0500	0.05312		mg/L		106	75 - 125	2	25
Bromochloromethane	0.0500	0.04415		mg/L		88	60 - 140	5	25
Bromodichloromethane	0.0500	0.04585		mg/L		92	75 - 125	5	25
Bromoform	0.0500	0.04155		mg/L		83	75 - 125	3	25
Bromomethane	0.0500	0.03663		mg/L		73	60 - 140	24	25
2-Butanone	0.250	0.2287		mg/L		91	60 - 140	5	25
Carbon tetrachloride	0.0500	0.04977		mg/L		100	62 - 125	11	25
Chlorobenzene	0.0500	0.04826		mg/L		97	60 - 133	2	25
Chloroethane	0.0500	0.05188		mg/L		104	60 - 140	9	25
Chloroform	0.0500	0.04776		mg/L		96	70 - 130	5	25
Chloromethane	0.0500	0.04739		mg/L		95	60 - 140	13	25
2-Chlorotoluene	0.0500	0.04861		mg/L		97	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05264		mg/L		105	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.04745		mg/L		95	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.04685		mg/L		94	74 - 125	3	25
Dibromochloromethane	0.0500	0.04454		mg/L		89	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04524		mg/L		90	59 - 125	14	25
1,2-Dibromoethane	0.0500	0.05113		mg/L		102	73 - 125	1	25
1,2-Dichlorobenzene	0.0500	0.05243		mg/L		105	75 - 125	0	25
1,3-Dichlorobenzene	0.0500	0.04799		mg/L		96	75 - 125	2	25
1,4-Dichlorobenzene	0.0500	0.05309		mg/L		106	75 - 125	1	25
Dichlorodifluoromethane	0.0500	0.05626		mg/L		113	70 - 130	9	25
1,1-Dichloroethane	0.0500	0.04597		mg/L		92	72 - 125	6	25
1,2-Dichloroethane	0.0500	0.05145		mg/L		103	68 - 127	4	25
1,1-Dichloroethene	0.0500	0.04270		mg/L		85	59 - 172	12	25
1,2-Dichloropropane	0.0500	0.04671		mg/L		93	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.05038		mg/L		101	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.04788		mg/L		96	75 - 125	6	25
1,1-Dichloropropene	0.0500	0.04598		mg/L		92	75 - 125	8	25
Ethylbenzene	0.0500	0.04845		mg/L		97	75 - 125	3	25
Hexachlorobutadiene	0.0500	0.05234		mg/L		105	75 - 125	1	25
Isopropylbenzene	0.0500	0.04779		mg/L		96	75 - 125	3	25
Methylene Chloride	0.0500	0.04698		mg/L		94	75 - 125	5	25
m,p-Xylenes	0.0500	0.04946		mg/L		99	75 - 125	3	25
MTBE	0.0500	0.04637		mg/L		93	65 - 135	9	25
Naphthalene	0.0500	0.05556		mg/L		111	70 - 130	24	25
n-Butylbenzene	0.0500	0.04791		mg/L		96	75 - 125	3	25
N-Propylbenzene	0.0500	0.04933		mg/L		99	75 - 125	3	25
o-Xylene	0.0500	0.04719		mg/L		94	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04771		mg/L		95	75 - 125	3	25
sec-Butylbenzene	0.0500	0.04816		mg/L		96	75 - 125	3	25
Styrene	0.0500	0.04614		mg/L		92	75 - 125	1	25
tert-Butylbenzene	0.0500	0.04756		mg/L		95	75 - 125	4	25
1,1,1,2-Tetrachloroethane	0.0500	0.04701		mg/L		94	72 - 125	0	25
1,1,2,2-Tetrachloroethane	0.0500	0.04804		mg/L		96	74 - 125	5	25
Tetrachloroethene	0.0500	0.04827		mg/L		97	71 - 125	2	25
Toluene	0.0500	0.04741		mg/L		95	59 - 139	3	25

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QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-67473/4

Matrix: Water

Analysis Batch: 67473

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	0.04283		mg/L		86	75 - 125	13	25
trans-1,3-Dichloropropene	0.0500	0.04733		mg/L		95	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.05962		mg/L		119	75 - 137	24	25
1,2,4-Trichlorobenzene	0.0500	0.05209		mg/L		104	75 - 135	12	25
1,1,1-Trichloroethane	0.0500	0.04705		mg/L		94	75 - 125	8	25
1,1,2-Trichloroethane	0.0500	0.05069		mg/L		101	75 - 127	1	25
Trichloroethene	0.0500	0.04629		mg/L		93	62 - 137	7	25
Trichlorofluoromethane	0.0500	0.05615		mg/L		112	60 - 140	9	25
1,2,3-Trichloropropane	0.0500	0.04784		mg/L		96	75 - 125	2	25
1,2,4-Trimethylbenzene	0.0500	0.04725		mg/L		94	75 - 125	2	25
1,3,5-Trimethylbenzene	0.0500	0.04733		mg/L		95	60 - 140	3	25
Vinyl chloride	0.0500	0.05204		mg/L		104	60 - 140	9	25

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-67609/3

Matrix: Water

Analysis Batch: 67609

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			09/01/22 18:46	1
Chloride	<0.200	U	0.500	0.200 mg/L			09/01/22 18:46	1
Fluoride	<0.100	U	0.500	0.100 mg/L			09/01/22 18:46	1
Sulfate	<0.109	U	0.500	0.109 mg/L			09/01/22 18:46	1

Lab Sample ID: LCS 860-67609/6

Matrix: Water

Analysis Batch: 67609

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	9.966		mg/L		100	90 - 110
Chloride	10.0	10.10		mg/L		101	90 - 110
Fluoride	10.0	10.51		mg/L		105	90 - 110
Sulfate	10.0	10.01		mg/L		100	90 - 110

Lab Sample ID: LCSD 860-67609/7

Matrix: Water

Analysis Batch: 67609

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	9.997		mg/L		100	90 - 110	0	20
Chloride	10.0	10.14		mg/L		101	90 - 110	0	20
Fluoride	10.0	10.55		mg/L		105	90 - 110	0	20

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QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-67609/7

Matrix: Water

Analysis Batch: 67609

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	10.07		mg/L		101	90 - 110	1	20

Lab Sample ID: LLCS 860-67609/5

Matrix: Water

Analysis Batch: 67609

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	0.5113		mg/L		102	50 - 150		
Fluoride	0.500	0.5113		mg/L		102	50 - 150		
Sulfate	0.500	0.4788	J	mg/L		96	50 - 150		

Lab Sample ID: MB 860-67610/3

Matrix: Water

Analysis Batch: 67610

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			09/01/22 18:46	1
Nitrite as N	0.02982	J	0.100	0.0293 mg/L			09/01/22 18:46	1

Lab Sample ID: LCS 860-67610/6

Matrix: Water

Analysis Batch: 67610

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	10.34		mg/L		103	80 - 120		
Nitrite as N	5.00	4.896		mg/L		98	80 - 120		

Lab Sample ID: LCSD 860-67610/7

Matrix: Water

Analysis Batch: 67610

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	10.38		mg/L		104	80 - 120	0	20
Nitrite as N	5.00	4.916		mg/L		98	80 - 120	0	20

Lab Sample ID: LLCS 860-67610/4

Matrix: Water

Analysis Batch: 67610

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	0.09015	J	mg/L		90	50 - 150		
Nitrite as N	0.100	0.08995	J	mg/L		90	50 - 150		

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QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-67635/1-A

Matrix: Water

Analysis Batch: 67949

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 67635

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		09/02/22 09:00	09/02/22 15:21	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		09/02/22 09:00	09/02/22 15:21	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		09/02/22 09:00	09/02/22 15:21	1
Sodium	<0.152	U	0.500	0.152 mg/L		09/02/22 09:00	09/02/22 15:21	1
SiO2	<0.471	U	1.07	0.471 mg/L		09/02/22 09:00	09/02/22 15:21	1

Lab Sample ID: LCS 860-67635/2-A

Matrix: Water

Analysis Batch: 67949

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 67635

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	25.50		mg/L		102	85 - 115
Magnesium	25.0	25.50		mg/L		102	85 - 115
Potassium	10.0	10.70		mg/L		107	85 - 115
Sodium	25.0	26.10		mg/L		104	85 - 115
SiO2	21.4	22.68		mg/L		106	85 - 115

Lab Sample ID: LCSD 860-67635/3-A

Matrix: Water

Analysis Batch: 67949

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 67635

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	25.10		mg/L		100	85 - 115	2	20
Magnesium	25.0	25.30		mg/L		101	85 - 115	1	20
Potassium	10.0	10.60		mg/L		106	85 - 115	1	20
Sodium	25.0	25.80		mg/L		103	85 - 115	1	20
SiO2	21.4	22.68		mg/L		106	85 - 115	0	20

Lab Sample ID: LLCS 860-67635/4-A

Matrix: Water

Analysis Batch: 67949

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 67635

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.200	0.2470		mg/L		124	50 - 150
Magnesium	0.200	0.1840	J	mg/L		92	50 - 150
Potassium	0.500	0.4690	J	mg/L		94	50 - 150
Sodium	0.500	0.4830	J	mg/L		97	50 - 150
SiO2	1.07	1.070		mg/L		100	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-67748/4

Matrix: Water

Analysis Batch: 67748

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			09/02/22 12:33	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			09/02/22 12:33	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			09/02/22 12:33	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			09/02/22 12:33	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 860-67748/4

Matrix: Water

Analysis Batch: 67748

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			09/02/22 12:33	1

Lab Sample ID: LCS 860-67748/5

Matrix: Water

Analysis Batch: 67748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	253.9		mg/L		102	85 - 115

Lab Sample ID: LCSD 860-67748/6

Matrix: Water

Analysis Batch: 67748

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	255.9		mg/L		102	85 - 115	1	20

Lab Sample ID: 880-18745-1 DU

Matrix: Water

Analysis Batch: 67748

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	651		649.1		mg/L		0.3	20
Bicarbonate Alkalinity as CaCO3	651		649.1		mg/L		0.3	20
Carbonate Alkalinity as CaCO3	<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 860-67578/1

Matrix: Water

Analysis Batch: 67578

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			09/01/22 15:53	1

Lab Sample ID: LCS 860-67578/2

Matrix: Water

Analysis Batch: 67578

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	1001		mg/L		100	80 - 120

Lab Sample ID: LCSD 860-67578/3

Matrix: Water

Analysis Batch: 67578

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	997.0		mg/L		100	80 - 120	0	10

Eurofins Midland

QC Sample Results

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

Job ID: 880-18745-1
SDG: Hobbs NM

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-18745-1 DU
Matrix: Water
Analysis Batch: 67739

Client Sample ID: Levey Well
Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
pH	6.9	HF	6.9		SU		0.4	20
Temperature	20.2	HF	20.2		Celsius		0	20

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QC Association Summary

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

Job ID: 880-18745-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 67473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total/NA	Water	8260C	
MB 860-67473/10	Method Blank	Total/NA	Water	8260C	
LCS 860-67473/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-67473/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 67609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total/NA	Water	300.0	
MB 860-67609/3	Method Blank	Total/NA	Water	300.0	
LCS 860-67609/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-67609/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-67609/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 67610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total/NA	Water	300.0	
MB 860-67610/3	Method Blank	Total/NA	Water	300.0	
LCS 860-67610/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-67610/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-67610/4	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 67635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-67635/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-67635/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-67635/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-67635/4-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 67949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	67635
880-18745-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	67635
MB 860-67635/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	67635
LCS 860-67635/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	67635
LCSD 860-67635/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	67635
LLCS 860-67635/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	67635

General Chemistry

Analysis Batch: 67391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total/NA	Water	SM 1030E	

Analysis Batch: 67578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-67578/1	Method Blank	Total/NA	Water	SM 2540C	

Eurofins Midland

QC Association Summary

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

Job ID: 880-18745-1
SDG: Hobbs NM

General Chemistry (Continued)

Analysis Batch: 67578 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-67578/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-67578/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 67739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total/NA	Water	SM 4500 H+ B	
880-18745-1 DU	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 67748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18745-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-67748/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-67748/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-67748/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
880-18745-1 DU	Levey Well	Total/NA	Water	SM 2320B	

Lab Chronicle

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

Job ID: 880-18745-1
SDG: Hobbs NM

Client Sample ID: Levey Well
Date Collected: 08/31/22 10:45
Date Received: 08/31/22 14:48

Lab Sample ID: 880-18745-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	67473	AN	EET HOU	09/01/22 18:32
Total/NA	Analysis	300.0		1	67609	WP	EET HOU	09/01/22 20:49
Total/NA	Analysis	300.0		1	67610	WP	EET HOU	09/01/22 20:49
Total Recoverable	Prep	200.7			67635	MD	EET HOU	09/02/22 09:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	67949	DP	EET HOU	09/02/22 15:49
Total Recoverable	Prep	200.7			67635	MD	EET HOU	09/02/22 09:00
Total Recoverable	Analysis	200.7 Rev 4.4		50	67949	DP	EET HOU	09/02/22 15:55
Total/NA	Analysis	SM 1030E		1	67391	AA	EET HOU	08/31/22 14:41
Total/NA	Analysis	SM 2320B		1	67748	TL	EET HOU	09/02/22 13:03
Total/NA	Analysis	SM 2540C		1	67578	MCA	EET HOU	09/01/22 15:53
Total/NA	Analysis	SM 4500 H+ B		1	67739	TL	EET HOU	09/02/22 14:15

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: 880-18745-1
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: 880-18745-1
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: 880-18745-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-18745-1	Levey Well	Water	08/31/22 10:45	08/31/22 14:48

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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) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta GA (770) 449-8800 Tampa, FL (813) 620-2000

Project Manager:	Beaux Jennings	Bill to, (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Wadley #210	Address:	
City, State ZIP:	Midland TX	City, State ZIP:	
Phone:	432-230-3344	Email:	bjenning@ensolum.com

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



880-18745 Chain of Custody

Project Name:	Levey Well	Hobbs NM	Turn Around	ANALYSIS REQUEST										Work Order Notes					
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):	18.15		Thermometer ID																
Received intact:	Yes ☒ No ☐		Correction Factor:																
Cooler Custody Seals:	Yes ☐ No ☒		Total Containers:																
Sample Custody Seals:	Yes ☐ No ☒																		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers										Sample Comments				
Levey Well	GW	8-31-22	1045	—	7	VOCs	X	Anions: F, Cl, SO4, B	X	Cations: Ca, K, Mg, Na, Si	X	pH	X	Alkalinity	X	TDS	X	24hr	

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Cu	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															

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8/31/22			2
		1449			4
					6

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.

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-18745-1

SDG Number: Hobbs NM

Login Number: 18745

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: 880-18745-1

SDG Number: Hobbs NM

Login Number: 18745

List Number: 2

Creator: Bolch, Taylor

List Source: Eurofins Houston

List Creation: 09/01/22 02:14 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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-18746-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

Authorized for release by:

9/7/2022 6:37:02 PM

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: South Hobbs - 03B1417002

Laboratory Job ID: 880-18746-1

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Definitions/Glossary

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

Job ID: 880-18746-1

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.
S1-	Surrogate recovery exceeds control limits, low biased.
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.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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.

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: South Hobbs - 03B1417002

Job ID: 880-18746-1

Glossary (Continued)

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

- 1
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Case Narrative

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

Job ID: 880-18746-1

Job ID: 880-18746-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-18746-1****Receipt**

The samples were received on 8/31/2022 2:48 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 1.5°C

GC/MS VOA

Method 8260C: The matrix spike(MS) recoveries for analytical batch 860-67473 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (880-18746-2). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: MW-2 (880-18746-2). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-67609 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 analytical batch 860-67610 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 860-67610 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.

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: 880-18746-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-18746-1

Date Collected: 08/31/22 11:10

Matrix: Water

Date Received: 08/31/22 14:48

Method: 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			09/01/22 17:35	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			09/01/22 17:35	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			09/01/22 17:35	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			09/01/22 17:35	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			09/01/22 17:35	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			09/01/22 17:35	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			09/01/22 17:35	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			09/01/22 17:35	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			09/01/22 17:35	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			09/01/22 17:35	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			09/01/22 17:35	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			09/01/22 17:35	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			09/01/22 17:35	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			09/01/22 17:35	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			09/01/22 17:35	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			09/01/22 17:35	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			09/01/22 17:35	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			09/01/22 17:35	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			09/01/22 17:35	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			09/01/22 17:35	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/01/22 17:35	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/01/22 17:35	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			09/01/22 17:35	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			09/01/22 17:35	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			09/01/22 17:35	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			09/01/22 17:35	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			09/01/22 17:35	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			09/01/22 17:35	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			09/01/22 17:35	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			09/01/22 17:35	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			09/01/22 17:35	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			09/01/22 17:35	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			09/01/22 17:35	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			09/01/22 17:35	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			09/01/22 17:35	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			09/01/22 17:35	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			09/01/22 17:35	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			09/01/22 17:35	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			09/01/22 17:35	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			09/01/22 17:35	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			09/01/22 17:35	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			09/01/22 17:35	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			09/01/22 17:35	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			09/01/22 17:35	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			09/01/22 17:35	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			09/01/22 17:35	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			09/01/22 17:35	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			09/01/22 17:35	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			09/01/22 17:35	1

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Client Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-18746-1

Date Collected: 08/31/22 11:10

Matrix: Water

Date Received: 08/31/22 14:48

Method: 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			09/01/22 17:35	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			09/01/22 17:35	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			09/01/22 17:35	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			09/01/22 17:35	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			09/01/22 17:35	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			09/01/22 17:35	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			09/01/22 17:35	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			09/01/22 17:35	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			09/01/22 17:35	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			09/01/22 17:35	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			09/01/22 17:35	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			09/01/22 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		74 - 124		09/01/22 17:35	1
Dibromofluoromethane (Surr)	96		75 - 131		09/01/22 17:35	1
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		09/01/22 17:35	1
Toluene-d8 (Surr)	100		80 - 117		09/01/22 17:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.932	U	4.72	0.932 mg/L			09/02/22 15:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.932	U	4.72	0.932 mg/L		09/02/22 13:42	09/02/22 15:02	1
Diesel Range Organics (Over C10-C28)	<0.932	U	4.72	0.932 mg/L		09/02/22 13:42	09/02/22 15:02	1
Oil Range Organics (Over C28-C36)	<0.900	U	4.72	0.900 mg/L		09/02/22 13:42	09/02/22 15:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 135			09/02/22 13:42	09/02/22 15:02	1
o-Terphenyl	122		70 - 135			09/02/22 13:42	09/02/22 15:02	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.9		0.500	0.200 mg/L			09/01/22 20:25	1
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			09/01/22 20:25	1
Fluoride	0.628		0.500	0.100 mg/L			09/01/22 20:25	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			09/01/22 20:25	1
Sulfate	36.7		0.500	0.109 mg/L			09/01/22 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	277		4.00	4.00 mg/L			09/02/22 13:41	1
Bicarbonate Alkalinity as CaCO3	277		4.00	4.00 mg/L			09/02/22 13:41	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			09/02/22 13:41	1
Carbon dioxide	266			mg/L			09/02/22 16:50	1
Carbon Dioxide, Free	22.0			mg/L			09/02/22 16:50	1
pH	7.4	HF		SU			09/02/22 14:15	1

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Client Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-18746-1

Date Collected: 08/31/22 11:10

Matrix: Water

Date Received: 08/31/22 14:48

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature	19.9	HF		Celsius			09/02/22 14:15	1
Sulfide	1.20	J	5.00	0.495 mg/L			09/06/22 16:20	1

Client Sample ID: MW-2

Lab Sample ID: 880-18746-2

Date Collected: 08/31/22 12:20

Matrix: Water

Date Received: 08/31/22 14:48

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0326		0.00100	0.000533 mg/L			09/02/22 15:27	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			09/02/22 15:27	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			09/02/22 15:27	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			09/02/22 15:27	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			09/02/22 15:27	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			09/02/22 15:27	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			09/02/22 15:27	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			09/02/22 15:27	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			09/02/22 15:27	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			09/02/22 15:27	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			09/02/22 15:27	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			09/02/22 15:27	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			09/02/22 15:27	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			09/02/22 15:27	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			09/02/22 15:27	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			09/02/22 15:27	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			09/02/22 15:27	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			09/02/22 15:27	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			09/02/22 15:27	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			09/02/22 15:27	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/02/22 15:27	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/02/22 15:27	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			09/02/22 15:27	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			09/02/22 15:27	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			09/02/22 15:27	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			09/02/22 15:27	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			09/02/22 15:27	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			09/02/22 15:27	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			09/02/22 15:27	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			09/02/22 15:27	1
Ethylbenzene	0.0498		0.00100	0.000411 mg/L			09/02/22 15:27	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			09/02/22 15:27	1
Isopropylbenzene	0.0251		0.00100	0.000613 mg/L			09/02/22 15:27	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			09/02/22 15:27	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			09/02/22 15:27	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			09/02/22 15:27	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			09/02/22 15:27	1
N-Propylbenzene	0.00714		0.00100	0.000498 mg/L			09/02/22 15:27	1
o-Xylene	0.0181		0.00100	0.000551 mg/L			09/02/22 15:27	1
p-Cymene (p-Isopropyltoluene)	0.00211		0.00100	0.000919 mg/L			09/02/22 15:27	1
sec-Butylbenzene	0.00259		0.00100	0.000468 mg/L			09/02/22 15:27	1

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Client Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-18746-2

Date Collected: 08/31/22 12:20

Matrix: Water

Date Received: 08/31/22 14:48

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.000655	U	0.00100	0.000655 mg/L			09/02/22 15:27	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			09/02/22 15:27	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			09/02/22 15:27	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			09/02/22 15:27	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			09/02/22 15:27	1
Toluene	0.00259		0.00100	0.000475 mg/L			09/02/22 15:27	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			09/02/22 15:27	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			09/02/22 15:27	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			09/02/22 15:27	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			09/02/22 15:27	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			09/02/22 15:27	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			09/02/22 15:27	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			09/02/22 15:27	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			09/02/22 15:27	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			09/02/22 15:27	1
1,2,4-Trimethylbenzene	0.0832		0.00100	0.000417 mg/L			09/02/22 15:27	1
1,3,5-Trimethylbenzene	0.0203		0.00100	0.000456 mg/L			09/02/22 15:27	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			09/02/22 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		74 - 124		09/02/22 15:27	1
Dibromofluoromethane (Surr)	95		75 - 131		09/02/22 15:27	1
1,2-Dichloroethane-d4 (Surr)	90		63 - 144		09/02/22 15:27	1
Toluene-d8 (Surr)	96		80 - 117		09/02/22 15:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylenes	0.247		0.0500	0.00620 mg/L			09/02/22 14:46	5
Xylenes, Total	0.266		0.0500	0.00620 mg/L			09/02/22 14:46	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		74 - 124		09/02/22 14:46	5
Dibromofluoromethane (Surr)	98		75 - 131		09/02/22 14:46	5
1,2-Dichloroethane-d4 (Surr)	91		63 - 144		09/02/22 14:46	5
Toluene-d8 (Surr)	95		80 - 117		09/02/22 14:46	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.08	J	4.81	0.950 mg/L			09/02/22 15:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.08	J	4.81	0.950 mg/L		09/02/22 13:42	09/02/22 15:22	1
Diesel Range Organics (Over C10-C28)	<0.950	U	4.81	0.950 mg/L		09/02/22 13:42	09/02/22 15:22	1
Oil Range Organics (Over C28-C36)	<0.917	U	4.81	0.917 mg/L		09/02/22 13:42	09/02/22 15:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	48	S1-	70 - 135	09/02/22 13:42	09/02/22 15:22	1
o-Terphenyl	62	S1-	70 - 135	09/02/22 13:42	09/02/22 15:22	1

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Client Sample Results

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

Job ID: 880-18746-1

Client Sample ID: MW-2
Date Collected: 08/31/22 12:20
Date Received: 08/31/22 14:48

Lab Sample ID: 880-18746-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.8		0.500	0.200	mg/L			09/01/22 20:37	1
Nitrate as N	0.175		0.100	0.0391	mg/L			09/01/22 20:37	1
Fluoride	<0.100	U	0.500	0.100	mg/L			09/01/22 20:37	1
Nitrite as N	0.238	B	0.100	0.0293	mg/L			09/01/22 20:37	1
Sulfate	94.4		0.500	0.109	mg/L			09/01/22 20:37	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1280		4.00	4.00	mg/L			09/02/22 13:57	1
Bicarbonate Alkalinity as CaCO3	1280		4.00	4.00	mg/L			09/02/22 13:57	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			09/02/22 13:57	1
Carbon dioxide	2420				mg/L			09/02/22 16:50	1
Carbon Dioxide, Free	1290				mg/L			09/02/22 16:50	1
pH	6.3	HF			SU			09/02/22 14:15	1
Temperature	20.0	HF			Celsius			09/02/22 14:15	1
Sulfide	1.00	J	5.00	0.495	mg/L			09/06/22 16:20	1

Surrogate Summary

Client: Ensolum

Job ID: 880-18746-1

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)
860-32340-C-4 MS	Matrix Spike	98	101	98	98
860-32431-F-5 MS	Matrix Spike	97	98	86	96
880-18746-1	MW-1	97	96	106	100
880-18746-2 - DL	MW-2	97	98	91	95
880-18746-2	MW-2	95	95	90	96
LCS 860-67473/3	Lab Control Sample	97	99	95	96
LCS 860-67625/3	Lab Control Sample	99	98	89	96
LCSD 860-67473/4	Lab Control Sample Dup	97	98	94	98
LCSD 860-67625/4	Lab Control Sample Dup	97	99	87	96
MB 860-67473/10	Method Blank	102	94	105	102
MB 860-67625/11	Method Blank	94	101	92	97
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)
880-18746-1	MW-1	95	122
880-18746-2	MW-2	48 S1-	62 S1-
LCS 860-67729/2-A	Lab Control Sample	90	108
LCSD 860-67729/3-A	Lab Control Sample Dup	111	118
MB 860-67729/1-A	Method Blank	93	124
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-67473/10

Matrix: Water

Analysis Batch: 67473

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			09/01/22 12:32	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			09/01/22 12:32	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			09/01/22 12:32	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			09/01/22 12:32	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			09/01/22 12:32	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			09/01/22 12:32	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			09/01/22 12:32	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			09/01/22 12:32	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			09/01/22 12:32	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			09/01/22 12:32	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			09/01/22 12:32	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			09/01/22 12:32	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			09/01/22 12:32	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			09/01/22 12:32	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			09/01/22 12:32	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			09/01/22 12:32	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			09/01/22 12:32	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			09/01/22 12:32	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			09/01/22 12:32	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			09/01/22 12:32	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/01/22 12:32	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			09/01/22 12:32	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			09/01/22 12:32	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			09/01/22 12:32	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			09/01/22 12:32	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			09/01/22 12:32	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			09/01/22 12:32	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			09/01/22 12:32	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			09/01/22 12:32	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			09/01/22 12:32	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			09/01/22 12:32	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			09/01/22 12:32	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			09/01/22 12:32	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			09/01/22 12:32	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			09/01/22 12:32	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			09/01/22 12:32	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			09/01/22 12:32	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			09/01/22 12:32	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			09/01/22 12:32	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			09/01/22 12:32	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			09/01/22 12:32	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			09/01/22 12:32	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			09/01/22 12:32	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			09/01/22 12:32	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			09/01/22 12:32	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			09/01/22 12:32	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			09/01/22 12:32	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			09/01/22 12:32	1

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QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-67473/10

Matrix: Water

Analysis Batch: 67473

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			09/01/22 12:32	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			09/01/22 12:32	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			09/01/22 12:32	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			09/01/22 12:32	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			09/01/22 12:32	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			09/01/22 12:32	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			09/01/22 12:32	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			09/01/22 12:32	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			09/01/22 12:32	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			09/01/22 12:32	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			09/01/22 12:32	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			09/01/22 12:32	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			09/01/22 12:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		09/01/22 12:32	1
Dibromofluoromethane (Surr)	94		75 - 131		09/01/22 12:32	1
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		09/01/22 12:32	1
Toluene-d8 (Surr)	102		80 - 117		09/01/22 12:32	1

Lab Sample ID: LCS 860-67473/3

Matrix: Water

Analysis Batch: 67473

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	0.04936		mg/L		99	66 - 142
Bromobenzene	0.0500	0.05436		mg/L		109	75 - 125
Bromochloromethane	0.0500	0.04663		mg/L		93	60 - 140
Bromodichloromethane	0.0500	0.04805		mg/L		96	75 - 125
Bromoform	0.0500	0.04019		mg/L		80	75 - 125
Bromomethane	0.0500	0.04642		mg/L		93	60 - 140
2-Butanone	0.250	0.2165		mg/L		87	60 - 140
Carbon tetrachloride	0.0500	0.05554		mg/L		111	62 - 125
Chlorobenzene	0.0500	0.04911		mg/L		98	60 - 133
Chloroethane	0.0500	0.05690		mg/L		114	60 - 140
Chloroform	0.0500	0.04996		mg/L		100	70 - 130
Chloromethane	0.0500	0.05375		mg/L		107	60 - 140
2-Chlorotoluene	0.0500	0.04994		mg/L		100	73 - 125
4-Chlorotoluene	0.0500	0.05368		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05046		mg/L		101	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04839		mg/L		97	74 - 125
Dibromochloromethane	0.0500	0.04389		mg/L		88	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.03936		mg/L		79	59 - 125
1,2-Dibromoethane	0.0500	0.05070		mg/L		101	73 - 125
1,2-Dichlorobenzene	0.0500	0.05259		mg/L		105	75 - 125
1,3-Dichlorobenzene	0.0500	0.04893		mg/L		98	75 - 125
1,4-Dichlorobenzene	0.0500	0.05360		mg/L		107	75 - 125
Dichlorodifluoromethane	0.0500	0.06161		mg/L		123	70 - 130

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QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-67473/3

Matrix: Water

Analysis Batch: 67473

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	0.04889		mg/L		98	72 - 125
1,2-Dichloroethane	0.0500	0.05348		mg/L		107	68 - 127
1,1-Dichloroethene	0.0500	0.04817		mg/L		96	59 - 172
1,2-Dichloropropane	0.0500	0.04919		mg/L		98	74 - 125
1,3-Dichloropropane	0.0500	0.05001		mg/L		100	75 - 125
2,2-Dichloropropane	0.0500	0.05110		mg/L		102	75 - 125
1,1-Dichloropropene	0.0500	0.04997		mg/L		100	75 - 125
Ethylbenzene	0.0500	0.04969		mg/L		99	75 - 125
Hexachlorobutadiene	0.0500	0.05163		mg/L		103	75 - 125
Isopropylbenzene	0.0500	0.04904		mg/L		98	75 - 125
Methylene Chloride	0.0500	0.04962		mg/L		99	75 - 125
m,p-Xylenes	0.0500	0.05088		mg/L		102	75 - 125
MTBE	0.0500	0.05065		mg/L		101	65 - 135
Naphthalene	0.0500	0.04368		mg/L		87	70 - 130
n-Butylbenzene	0.0500	0.04920		mg/L		98	75 - 125
N-Propylbenzene	0.0500	0.05097		mg/L		102	75 - 125
o-Xylene	0.0500	0.04838		mg/L		97	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.04902		mg/L		98	75 - 125
sec-Butylbenzene	0.0500	0.04984		mg/L		100	75 - 125
Styrene	0.0500	0.04673		mg/L		93	75 - 125
tert-Butylbenzene	0.0500	0.04938		mg/L		99	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04696		mg/L		94	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04553		mg/L		91	74 - 125
Tetrachloroethene	0.0500	0.04913		mg/L		98	71 - 125
Toluene	0.0500	0.04861		mg/L		97	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04889		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04695		mg/L		94	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04664		mg/L		93	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04611		mg/L		92	75 - 135
1,1,1-Trichloroethane	0.0500	0.05078		mg/L		102	75 - 125
1,1,2-Trichloroethane	0.0500	0.05027		mg/L		101	75 - 127
Trichloroethene	0.0500	0.04988		mg/L		100	62 - 137
Trichlorofluoromethane	0.0500	0.06145		mg/L		123	60 - 140
1,2,3-Trichloropropane	0.0500	0.04666		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04834		mg/L		97	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04878		mg/L		98	60 - 140
Vinyl chloride	0.0500	0.05678		mg/L		114	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	95		63 - 144
Toluene-d8 (Surr)	96		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-67473/4

Matrix: Water

Analysis Batch: 67473

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	0.04695		mg/L		94	66 - 142	5	25
Bromobenzene	0.0500	0.05312		mg/L		106	75 - 125	2	25
Bromochloromethane	0.0500	0.04415		mg/L		88	60 - 140	5	25
Bromodichloromethane	0.0500	0.04585		mg/L		92	75 - 125	5	25
Bromoform	0.0500	0.04155		mg/L		83	75 - 125	3	25
Bromomethane	0.0500	0.03663		mg/L		73	60 - 140	24	25
2-Butanone	0.250	0.2287		mg/L		91	60 - 140	5	25
Carbon tetrachloride	0.0500	0.04977		mg/L		100	62 - 125	11	25
Chlorobenzene	0.0500	0.04826		mg/L		97	60 - 133	2	25
Chloroethane	0.0500	0.05188		mg/L		104	60 - 140	9	25
Chloroform	0.0500	0.04776		mg/L		96	70 - 130	5	25
Chloromethane	0.0500	0.04739		mg/L		95	60 - 140	13	25
2-Chlorotoluene	0.0500	0.04861		mg/L		97	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05264		mg/L		105	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.04745		mg/L		95	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.04685		mg/L		94	74 - 125	3	25
Dibromochloromethane	0.0500	0.04454		mg/L		89	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04524		mg/L		90	59 - 125	14	25
1,2-Dibromoethane	0.0500	0.05113		mg/L		102	73 - 125	1	25
1,2-Dichlorobenzene	0.0500	0.05243		mg/L		105	75 - 125	0	25
1,3-Dichlorobenzene	0.0500	0.04799		mg/L		96	75 - 125	2	25
1,4-Dichlorobenzene	0.0500	0.05309		mg/L		106	75 - 125	1	25
Dichlorodifluoromethane	0.0500	0.05626		mg/L		113	70 - 130	9	25
1,1-Dichloroethane	0.0500	0.04597		mg/L		92	72 - 125	6	25
1,2-Dichloroethane	0.0500	0.05145		mg/L		103	68 - 127	4	25
1,1-Dichloroethene	0.0500	0.04270		mg/L		85	59 - 172	12	25
1,2-Dichloropropane	0.0500	0.04671		mg/L		93	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.05038		mg/L		101	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.04788		mg/L		96	75 - 125	6	25
1,1-Dichloropropene	0.0500	0.04598		mg/L		92	75 - 125	8	25
Ethylbenzene	0.0500	0.04845		mg/L		97	75 - 125	3	25
Hexachlorobutadiene	0.0500	0.05234		mg/L		105	75 - 125	1	25
Isopropylbenzene	0.0500	0.04779		mg/L		96	75 - 125	3	25
Methylene Chloride	0.0500	0.04698		mg/L		94	75 - 125	5	25
m,p-Xylenes	0.0500	0.04946		mg/L		99	75 - 125	3	25
MTBE	0.0500	0.04637		mg/L		93	65 - 135	9	25
Naphthalene	0.0500	0.05556		mg/L		111	70 - 130	24	25
n-Butylbenzene	0.0500	0.04791		mg/L		96	75 - 125	3	25
N-Propylbenzene	0.0500	0.04933		mg/L		99	75 - 125	3	25
o-Xylene	0.0500	0.04719		mg/L		94	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04771		mg/L		95	75 - 125	3	25
sec-Butylbenzene	0.0500	0.04816		mg/L		96	75 - 125	3	25
Styrene	0.0500	0.04614		mg/L		92	75 - 125	1	25
tert-Butylbenzene	0.0500	0.04756		mg/L		95	75 - 125	4	25
1,1,1,2-Tetrachloroethane	0.0500	0.04701		mg/L		94	72 - 125	0	25
1,1,2,2-Tetrachloroethane	0.0500	0.04804		mg/L		96	74 - 125	5	25
Tetrachloroethene	0.0500	0.04827		mg/L		97	71 - 125	2	25
Toluene	0.0500	0.04741		mg/L		95	59 - 139	3	25

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QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-67473/4

Matrix: Water

Analysis Batch: 67473

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	0.04283		mg/L		86	75 - 125	13	25
trans-1,3-Dichloropropene	0.0500	0.04733		mg/L		95	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.05962		mg/L		119	75 - 137	24	25
1,2,4-Trichlorobenzene	0.0500	0.05209		mg/L		104	75 - 135	12	25
1,1,1-Trichloroethane	0.0500	0.04705		mg/L		94	75 - 125	8	25
1,1,2-Trichloroethane	0.0500	0.05069		mg/L		101	75 - 127	1	25
Trichloroethene	0.0500	0.04629		mg/L		93	62 - 137	7	25
Trichlorofluoromethane	0.0500	0.05615		mg/L		112	60 - 140	9	25
1,2,3-Trichloropropane	0.0500	0.04784		mg/L		96	75 - 125	2	25
1,2,4-Trimethylbenzene	0.0500	0.04725		mg/L		94	75 - 125	2	25
1,3,5-Trimethylbenzene	0.0500	0.04733		mg/L		95	60 - 140	3	25
Vinyl chloride	0.0500	0.05204		mg/L		104	60 - 140	9	25

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

Lab Sample ID: MB 860-67625/11

Matrix: Water

Analysis Batch: 67625

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		09/02/22 10:19	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		09/02/22 10:19	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		09/02/22 10:19	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		09/02/22 10:19	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		09/02/22 10:19	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		09/02/22 10:19	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		09/02/22 10:19	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		09/02/22 10:19	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		09/02/22 10:19	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		09/02/22 10:19	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		09/02/22 10:19	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		09/02/22 10:19	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		09/02/22 10:19	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		09/02/22 10:19	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		09/02/22 10:19	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		09/02/22 10:19	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		09/02/22 10:19	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		09/02/22 10:19	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		09/02/22 10:19	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		09/02/22 10:19	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		09/02/22 10:19	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		09/02/22 10:19	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		09/02/22 10:19	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		09/02/22 10:19	1

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QC Sample Results

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

Job ID: 880-18746-1

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

Lab Sample ID: MB 860-67625/11					Client Sample ID: Method Blank				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 67625									
	MB	MB							
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L			09/02/22 10:19	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L			09/02/22 10:19	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L			09/02/22 10:19	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L			09/02/22 10:19	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L			09/02/22 10:19	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L			09/02/22 10:19	1
Ethylbenzene	<0.000411	U	0.00100	0.000411	mg/L			09/02/22 10:19	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L			09/02/22 10:19	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613	mg/L			09/02/22 10:19	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L			09/02/22 10:19	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124	mg/L			09/02/22 10:19	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L			09/02/22 10:19	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L			09/02/22 10:19	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644	mg/L			09/02/22 10:19	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498	mg/L			09/02/22 10:19	1
o-Xylene	<0.000551	U	0.00100	0.000551	mg/L			09/02/22 10:19	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919	mg/L			09/02/22 10:19	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468	mg/L			09/02/22 10:19	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L			09/02/22 10:19	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L			09/02/22 10:19	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L			09/02/22 10:19	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L			09/02/22 10:19	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L			09/02/22 10:19	1
Toluene	<0.000475	U	0.00100	0.000475	mg/L			09/02/22 10:19	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L			09/02/22 10:19	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127	mg/L			09/02/22 10:19	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217	mg/L			09/02/22 10:19	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175	mg/L			09/02/22 10:19	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169	mg/L			09/02/22 10:19	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511	mg/L			09/02/22 10:19	1
Trichloroethene	<0.000791	U	0.00500	0.000791	mg/L			09/02/22 10:19	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638	mg/L			09/02/22 10:19	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490	mg/L			09/02/22 10:19	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417	mg/L			09/02/22 10:19	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456	mg/L			09/02/22 10:19	1
Vinyl chloride	<0.000638	U	0.00200	0.000638	mg/L			09/02/22 10:19	1
Xylenes, Total	<0.00124	U	0.0100	0.00124	mg/L			09/02/22 10:19	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		74 - 124					09/02/22 10:19	1
Dibromofluoromethane (Surr)	101		75 - 131					09/02/22 10:19	1
1,2-Dichloroethane-d4 (Surr)	92		63 - 144					09/02/22 10:19	1
Toluene-d8 (Surr)	97		80 - 117					09/02/22 10:19	1

QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-67625/3

Matrix: Water

Analysis Batch: 67625

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	0.05235		mg/L		105	66 - 142
Bromobenzene	0.0500	0.05375		mg/L		108	75 - 125
Bromochloromethane	0.0500	0.05320		mg/L		106	60 - 140
Bromodichloromethane	0.0500	0.05077		mg/L		102	75 - 125
Bromoform	0.0500	0.05477		mg/L		110	75 - 125
Bromomethane	0.0500	0.04831		mg/L		97	60 - 140
2-Butanone	0.250	0.2540		mg/L		102	60 - 140
Carbon tetrachloride	0.0500	0.04986		mg/L		100	62 - 125
Chlorobenzene	0.0500	0.05294		mg/L		106	60 - 133
Chloroethane	0.0500	0.04599		mg/L		92	60 - 140
Chloroform	0.0500	0.05026		mg/L		101	70 - 130
Chloromethane	0.0500	0.04960		mg/L		99	60 - 140
2-Chlorotoluene	0.0500	0.05335		mg/L		107	73 - 125
4-Chlorotoluene	0.0500	0.05366		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05103		mg/L		102	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05167		mg/L		103	74 - 125
Dibromochloromethane	0.0500	0.05448		mg/L		109	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05977		mg/L		120	59 - 125
1,2-Dibromoethane	0.0500	0.05312		mg/L		106	73 - 125
1,2-Dichlorobenzene	0.0500	0.05471		mg/L		109	75 - 125
1,3-Dichlorobenzene	0.0500	0.05518		mg/L		110	75 - 125
1,4-Dichlorobenzene	0.0500	0.05480		mg/L		110	75 - 125
Dichlorodifluoromethane	0.0500	0.05385		mg/L		108	70 - 130
1,1-Dichloroethane	0.0500	0.04832		mg/L		97	72 - 125
1,2-Dichloroethane	0.0500	0.04658		mg/L		93	68 - 127
1,1-Dichloroethene	0.0500	0.05250		mg/L		105	59 - 172
1,2-Dichloropropane	0.0500	0.05211		mg/L		104	74 - 125
1,3-Dichloropropane	0.0500	0.05005		mg/L		100	75 - 125
2,2-Dichloropropane	0.0500	0.05175		mg/L		104	75 - 125
1,1-Dichloropropene	0.0500	0.05093		mg/L		102	75 - 125
Ethylbenzene	0.0500	0.05356		mg/L		107	75 - 125
Hexachlorobutadiene	0.0500	0.05190		mg/L		104	75 - 125
Isopropylbenzene	0.0500	0.05264		mg/L		105	75 - 125
Methylene Chloride	0.0500	0.04668		mg/L		93	75 - 125
m,p-Xylenes	0.0500	0.05251		mg/L		105	75 - 125
MTBE	0.0500	0.04464		mg/L		89	65 - 135
Naphthalene	0.0500	0.05992		mg/L		120	70 - 130
n-Butylbenzene	0.0500	0.05561		mg/L		111	75 - 125
N-Propylbenzene	0.0500	0.05421		mg/L		108	75 - 125
o-Xylene	0.0500	0.05202		mg/L		104	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05593		mg/L		112	75 - 125
sec-Butylbenzene	0.0500	0.05441		mg/L		109	75 - 125
Styrene	0.0500	0.05503		mg/L		110	75 - 125
tert-Butylbenzene	0.0500	0.05334		mg/L		107	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05144		mg/L		103	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05219		mg/L		104	74 - 125
Tetrachloroethene	0.0500	0.05510		mg/L		110	71 - 125
Toluene	0.0500	0.05162		mg/L		103	59 - 139

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QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-67625/3

Matrix: Water

Analysis Batch: 67625

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	0.05220		mg/L		104	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05196		mg/L		104	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05828		mg/L		117	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05815		mg/L		116	75 - 135
1,1,1-Trichloroethane	0.0500	0.04838		mg/L		97	75 - 125
1,1,2-Trichloroethane	0.0500	0.05138		mg/L		103	75 - 127
Trichloroethene	0.0500	0.05502		mg/L		110	62 - 137
Trichlorofluoromethane	0.0500	0.04883		mg/L		98	60 - 140
1,2,3-Trichloropropane	0.0500	0.05347		mg/L		107	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05476		mg/L		110	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05582		mg/L		112	60 - 140
Vinyl chloride	0.0500	0.05235		mg/L		105	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	89		63 - 144
Toluene-d8 (Surr)	96		80 - 117

Lab Sample ID: LCSD 860-67625/4

Matrix: Water

Analysis Batch: 67625

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	0.05323		mg/L		106	66 - 142	2	25
Bromobenzene	0.0500	0.05359		mg/L		107	75 - 125	0	25
Bromochloromethane	0.0500	0.05186		mg/L		104	60 - 140	3	25
Bromodichloromethane	0.0500	0.05091		mg/L		102	75 - 125	0	25
Bromoform	0.0500	0.05305		mg/L		106	75 - 125	3	25
Bromomethane	0.0500	0.04904		mg/L		98	60 - 140	2	25
2-Butanone	0.250	0.2315		mg/L		93	60 - 140	9	25
Carbon tetrachloride	0.0500	0.05140		mg/L		103	62 - 125	3	25
Chlorobenzene	0.0500	0.05325		mg/L		106	60 - 133	1	25
Chloroethane	0.0500	0.04688		mg/L		94	60 - 140	2	25
Chloroform	0.0500	0.05004		mg/L		100	70 - 130	0	25
Chloromethane	0.0500	0.05149		mg/L		103	60 - 140	4	25
2-Chlorotoluene	0.0500	0.05456		mg/L		109	73 - 125	2	25
4-Chlorotoluene	0.0500	0.05459		mg/L		109	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.05085		mg/L		102	75 - 125	0	25
cis-1,3-Dichloropropene	0.0500	0.05129		mg/L		103	74 - 125	1	25
Dibromochloromethane	0.0500	0.05257		mg/L		105	73 - 125	4	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05354		mg/L		107	59 - 125	11	25
1,2-Dibromoethane	0.0500	0.05130		mg/L		103	73 - 125	3	25
1,2-Dichlorobenzene	0.0500	0.05384		mg/L		108	75 - 125	2	25
1,3-Dichlorobenzene	0.0500	0.05571		mg/L		111	75 - 125	1	25
1,4-Dichlorobenzene	0.0500	0.05485		mg/L		110	75 - 125	0	25
Dichlorodifluoromethane	0.0500	0.05673		mg/L		113	70 - 130	5	25
1,1-Dichloroethane	0.0500	0.04970		mg/L		99	72 - 125	3	25

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QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-67625/4

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 67625

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichloroethane	0.0500	0.04570		mg/L		91	68 - 127	2	25
1,1-Dichloroethene	0.0500	0.05490		mg/L		110	59 - 172	4	25
1,2-Dichloropropane	0.0500	0.05140		mg/L		103	74 - 125	1	25
1,3-Dichloropropane	0.0500	0.04872		mg/L		97	75 - 125	3	25
2,2-Dichloropropane	0.0500	0.05239		mg/L		105	75 - 125	1	25
1,1-Dichloropropene	0.0500	0.05322		mg/L		106	75 - 125	4	25
Ethylbenzene	0.0500	0.05389		mg/L		108	75 - 125	1	25
Hexachlorobutadiene	0.0500	0.05459		mg/L		109	75 - 125	5	25
Isopropylbenzene	0.0500	0.05463		mg/L		109	75 - 125	4	25
Methylene Chloride	0.0500	0.04604		mg/L		92	75 - 125	1	25
m,p-Xylenes	0.0500	0.05349		mg/L		107	75 - 125	2	25
MTBE	0.0500	0.04412		mg/L		88	65 - 135	1	25
Naphthalene	0.0500	0.05402		mg/L		108	70 - 130	10	25
n-Butylbenzene	0.0500	0.05889		mg/L		118	75 - 125	6	25
N-Propylbenzene	0.0500	0.05597		mg/L		112	75 - 125	3	25
o-Xylene	0.0500	0.05267		mg/L		105	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05901		mg/L		118	75 - 125	5	25
sec-Butylbenzene	0.0500	0.05756		mg/L		115	75 - 125	6	25
Styrene	0.0500	0.05460		mg/L		109	75 - 125	1	25
tert-Butylbenzene	0.0500	0.05622		mg/L		112	75 - 125	5	25
1,1,1,2-Tetrachloroethane	0.0500	0.05071		mg/L		101	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.05043		mg/L		101	74 - 125	3	25
Tetrachloroethene	0.0500	0.05663		mg/L		113	71 - 125	3	25
Toluene	0.0500	0.05196		mg/L		104	59 - 139	1	25
trans-1,2-Dichloroethene	0.0500	0.05139		mg/L		103	75 - 125	2	25
trans-1,3-Dichloropropene	0.0500	0.05055		mg/L		101	66 - 125	3	25
1,2,3-Trichlorobenzene	0.0500	0.05396		mg/L		108	75 - 137	8	25
1,2,4-Trichlorobenzene	0.0500	0.05630		mg/L		113	75 - 135	3	25
1,1,1-Trichloroethane	0.0500	0.04897		mg/L		98	75 - 125	1	25
1,1,2-Trichloroethane	0.0500	0.04946		mg/L		99	75 - 127	4	25
Trichloroethene	0.0500	0.05557		mg/L		111	62 - 137	1	25
Trichlorofluoromethane	0.0500	0.04947		mg/L		99	60 - 140	1	25
1,2,3-Trichloropropane	0.0500	0.04820		mg/L		96	75 - 125	10	25
1,2,4-Trimethylbenzene	0.0500	0.05602		mg/L		112	75 - 125	2	25
1,3,5-Trimethylbenzene	0.0500	0.05714		mg/L		114	60 - 140	2	25
Vinyl chloride	0.0500	0.05404		mg/L		108	60 - 140	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	87		63 - 144
Toluene-d8 (Surr)	96		80 - 117

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-67729/1-A

Matrix: Water

Analysis Batch: 67681

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 67729

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		09/02/22 13:42	09/02/22 14:43	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		09/02/22 13:42	09/02/22 14:43	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		09/02/22 13:42	09/02/22 14:43	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 135			09/02/22 13:42	09/02/22 14:43	1
o-Terphenyl	124		70 - 135			09/02/22 13:42	09/02/22 14:43	1

Lab Sample ID: LCS 860-67729/2-A

Matrix: Water

Analysis Batch: 67681

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 67729

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	100	115.6		mg/L		116	70 - 135
Diesel Range Organics (Over C10-C28)	100	104.8		mg/L		105	70 - 135
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	90		70 - 135				
o-Terphenyl	108		70 - 135				

Lab Sample ID: LCSD 860-67729/3-A

Matrix: Water

Analysis Batch: 67681

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 67729

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	100	123.8		mg/L		124	70 - 135	7	35
Diesel Range Organics (Over C10-C28)	100	113.2		mg/L		113	70 - 135	8	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	111		70 - 135						
o-Terphenyl	118		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-67609/3

Matrix: Water

Analysis Batch: 67609

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			09/01/22 18:46	1
Fluoride	<0.100	U	0.500	0.100 mg/L			09/01/22 18:46	1
Sulfate	<0.109	U	0.500	0.109 mg/L			09/01/22 18:46	1

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-67609/6

Matrix: Water

Analysis Batch: 67609

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	10.10		mg/L		101	90 - 110
Fluoride	10.0	10.51		mg/L		105	90 - 110
Sulfate	10.0	10.01		mg/L		100	90 - 110

Lab Sample ID: LCSD 860-67609/7

Matrix: Water

Analysis Batch: 67609

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	10.14		mg/L		101	90 - 110	0	20
Fluoride	10.0	10.55		mg/L		105	90 - 110	0	20
Sulfate	10.0	10.07		mg/L		101	90 - 110	1	20

Lab Sample ID: LLCS 860-67609/5

Matrix: Water

Analysis Batch: 67609

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	0.5113		mg/L		102	50 - 150
Fluoride	0.500	0.5113		mg/L		102	50 - 150
Sulfate	0.500	0.4788	J	mg/L		96	50 - 150

Lab Sample ID: MB 860-67610/3

Matrix: Water

Analysis Batch: 67610

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			09/01/22 18:46	1
Nitrite as N	0.02982	J	0.100	0.0293 mg/L			09/01/22 18:46	1

Lab Sample ID: LCS 860-67610/6

Matrix: Water

Analysis Batch: 67610

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	10.34		mg/L		103	80 - 120
Nitrite as N	5.00	4.896		mg/L		98	80 - 120

Lab Sample ID: LCSD 860-67610/7

Matrix: Water

Analysis Batch: 67610

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	10.38		mg/L		104	80 - 120	0	20
Nitrite as N	5.00	4.916		mg/L		98	80 - 120	0	20

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LLCS 860-67610/4

Matrix: Water

Analysis Batch: 67610

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	0.09015	J	mg/L		90	50 - 150
Nitrite as N	0.100	0.08995	J	mg/L		90	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-67748/4

Matrix: Water

Analysis Batch: 67748

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			09/02/22 12:33	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			09/02/22 12:33	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			09/02/22 12:33	1

Lab Sample ID: LCS 860-67748/5

Matrix: Water

Analysis Batch: 67748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	253.9		mg/L		102	85 - 115

Lab Sample ID: LCSD 860-67748/6

Matrix: Water

Analysis Batch: 67748

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	255.9		mg/L		102	85 - 115	1	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-68115/1

Matrix: Water

Analysis Batch: 68115

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	mg/L			09/06/22 16:20	1

Lab Sample ID: LCS 860-68115/2

Matrix: Water

Analysis Batch: 68115

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	46.80		mg/L		94	80 - 120

Lab Sample ID: LCSD 860-68115/3

Matrix: Water

Analysis Batch: 68115

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	46.80		mg/L		94	80 - 120	0	20

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-18746-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 67473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	8260C	
MB 860-67473/10	Method Blank	Total/NA	Water	8260C	
LCS 860-67473/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-67473/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 67625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-2 - DL	MW-2	Total/NA	Water	8260C	
880-18746-2	MW-2	Total/NA	Water	8260C	
MB 860-67625/11	Method Blank	Total/NA	Water	8260C	
LCS 860-67625/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-67625/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 64807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	8015 NM	
880-18746-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 67681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	8015B NM	67729
880-18746-2	MW-2	Total/NA	Water	8015B NM	67729
880-18746-2	MW-2	Total/NA	Water	8015B NM	67729
MB 860-67729/1-A	Method Blank	Total/NA	Water	8015B NM	67729
LCS 860-67729/2-A	Lab Control Sample	Total/NA	Water	8015B NM	67729
LCSD 860-67729/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	67729

Prep Batch: 67729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-18746-2	MW-2	Total/NA	Water	8015NM Aq Prep	
880-18746-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-67729/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-67729/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-67729/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 67609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	300.0	
880-18746-2	MW-2	Total/NA	Water	300.0	
MB 860-67609/3	Method Blank	Total/NA	Water	300.0	
LCS 860-67609/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-67609/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-67609/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 67610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	300.0	

Eurofins Midland

QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-18746-1

HPLC/IC (Continued)

Analysis Batch: 67610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-2	MW-2	Total/NA	Water	300.0	
MB 860-67610/3	Method Blank	Total/NA	Water	300.0	
LCS 860-67610/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-67610/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-67610/4	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 67739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-18746-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 67748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	SM 2320B	
880-18746-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-67748/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-67748/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-67748/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 67782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-18746-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Analysis Batch: 68115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18746-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-18746-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-68115/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-68115/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-68115/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	

Lab Chronicle

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-18746-1

Client Sample ID: MW-1

Date Collected: 08/31/22 11:10

Date Received: 08/31/22 14:48

Lab Sample ID: 880-18746-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	67473	AN	EET HOU	09/01/22 17:35
Total/NA	Analysis	8015 NM		1	64807	MC	EET HOU	09/02/22 15:59
Total/NA	Prep	8015NM Aq Prep			67729	SAR	EET HOU	09/02/22 13:42
Total/NA	Analysis	8015B NM		1	67681	SAR	EET HOU	09/02/22 15:02
Total/NA	Analysis	300.0		1	67609	WP	EET HOU	09/01/22 20:25
Total/NA	Analysis	300.0		1	67610	WP	EET HOU	09/01/22 20:25
Total/NA	Analysis	SM 2320B		1	67748	TL	EET HOU	09/02/22 13:41
Total/NA	Analysis	SM 4500 CO2 D		1	67782	AA	EET HOU	09/02/22 16:50
Total/NA	Analysis	SM 4500 H+ B		1	67739	TL	EET HOU	09/02/22 14:15
Total/NA	Analysis	SM 4500 S2 F		1	68115	YGG	EET HOU	09/06/22 16:20

Client Sample ID: MW-2

Date Collected: 08/31/22 12:20

Date Received: 08/31/22 14:48

Lab Sample ID: 880-18746-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C	DL	5	67625	NA	EET HOU	09/02/22 14:46
Total/NA	Analysis	8260C		1	67625	NA	EET HOU	09/02/22 15:27
Total/NA	Analysis	8015 NM		1	64807	MC	EET HOU	09/02/22 15:59
Total/NA	Prep	8015NM Aq Prep			67729	SAR	EET HOU	09/02/22 13:42
Total/NA	Analysis	8015B NM		1	67681	SAR	EET HOU	09/02/22 15:22
Total/NA	Prep	8015NM Aq Prep			67729	SAR	EET HOU	09/02/22 15:00
Total/NA	Analysis	8015B NM		1	67681	SAR	EET HOU	09/02/22 16:55
Total/NA	Analysis	300.0		1	67609	WP	EET HOU	09/01/22 20:37
Total/NA	Analysis	300.0		1	67610	WP	EET HOU	09/01/22 20:37
Total/NA	Analysis	SM 2320B		1	67748	TL	EET HOU	09/02/22 13:57
Total/NA	Analysis	SM 4500 CO2 D		1	67782	AA	EET HOU	09/02/22 16:50
Total/NA	Analysis	SM 4500 H+ B		1	67739	TL	EET HOU	09/02/22 14:15
Total/NA	Analysis	SM 4500 S2 F		1	68115	YGG	EET HOU	09/06/22 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: South Hobbs - 03B1417002

Job ID: 880-18746-1

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: 880-18746-1

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: 880-18746-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-18746-1	MW-1	Water	08/31/22 11:10	08/31/22 14:48
880-18746-2	MW-2	Water	08/31/22 12:20	08/31/22 14:48

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



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 (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa FL (813-620-2000)



880-18746 Chain of Custody

Project Manager:	Beaux Jennings	Bill to (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Wadley #210	Address:	
City, State ZIP:	Midland TX	City, State ZIP:	
Phone:	432-230-3344	Email:	bjennings@ensolum.com

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

Project Name:	South Hobbs	Turn Around		ANALYSIS REQUEST	Work Order Notes
Project Number:	03B1417002	Routine	☐		
P.O. Number:	03B1417002	Rush 24 Hr			
Sampler's Name:	Shane Diller	Due Date			
SAMPLE RECEIPT			Temp Blank: Yes ☒ No ☐ Wet Ice: Yes ☐ No ☒		
Temperature (°C):	13.15	Thermometer ID	1002		
Received In tact:	Yes ☒ No ☐	Correction Factor:	.20		
Cooler Custody Seals:	Yes ☐ No ☒	Total Containers:			
Sample Custody Seals:	Yes ☐ No ☒				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Dissoved Carbon Dioxide 4500 CO2 c	Dissoved 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									Sample Comments
MM-1	GW	8-31-22	1110	-	7	X	X	X	X	X	X									24 Hr
MM-2	GW	8-31-22	1220	-	7	X	X	X	X	X	X									

CUSTODY SEAL
Date 8-31-22
Signature [Signature]
Thermo SCIENTIFIC
90009

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																															

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
[Signature]	[Signature]	8/31/22	[Signature]	[Signature]	1442

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-18746-1

Login Number: 18746

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: 880-18746-1

Login Number: 18746

List Number: 2

Creator: Bolch, Taylor

List Source: Eurofins Houston

List Creation: 09/01/22 02:14 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

August 08, 2022

Ensolum, LLC

Sample Delivery Group: L1521203
Samples Received: 08/03/2022
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 blue ink signature of Jason Romer, written in a cursive style.

Jason Romer
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

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LEVEY WELL L1521203-01 Air

Collected by
Shane Diller

Collected date/time
08/01/22 11:13

Received date/time
08/03/22 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1905504	100	08/04/22 23:10	08/04/22 23:10	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1906235	10000	08/05/22 16:25	08/05/22 16:25	DAH	Mt. Juliet, TN

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

LEVEY WELL L1521203-02 Air

Collected by
Shane Diller

Collected date/time
08/01/22 12:20

Received date/time
08/03/22 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1905504	1	08/04/22 21:18	08/04/22 21:18	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1906235	10	08/05/22 17:06	08/05/22 17:06	DAH	Mt. Juliet, TN

LEVEY WELL L1521203-03 Air

Collected by
Shane Diller

Collected date/time
08/01/22 13:28

Received date/time
08/03/22 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1905504	1	08/04/22 21:57	08/04/22 21:57	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1906235	10	08/05/22 17:47	08/05/22 17:47	DAH	Mt. Juliet, TN

LEVEY WELL L1521203-04 Air

Collected by
Shane Diller

Collected date/time
08/01/22 14:35

Received date/time
08/03/22 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1905504	20	08/04/22 22:32	08/04/22 22:32	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1906235	400	08/05/22 18:29	08/05/22 18:29	DAH	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.



Jason Romer
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.



Jason Romer
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 08/08/2022 16:05					
Project Name: Levey Well		Laboratory Job Number: L1521203-01, 02, 03 and 04					
Reviewer Name: Jason Romer		Prep Batch Number(s): WG1905504 and WG1906235					
# 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: 08/08/2022 16:05				
Project Name: Levey Well			Laboratory Job Number: L1521203-01, 02, 03 and 04				
Reviewer Name: Jason Romer			Prep Batch Number(s): WG1905504 and WG1906235				
# 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: 08/08/2022 16:05	
Project Name: Levey Well		Laboratory Job Number: L1521203-01, 02, 03 and 04	
Reviewer Name: Jason Romer		Prep Batch Number(s): WG1905504 and WG1906235	
ER #¹	Description		
1	TO-15 WG1905504 L1521203-04, 01 and 03: 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: 08/01/22 11:13

L1521203

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	5510	13100		100	WG1905504
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1905504
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1905504
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1905504
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1905504
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1905504
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1905504
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1905504
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1905504
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1905504
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1905504
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1905504
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1905504
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1905504
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1905504
Cyclohexane	110-82-7	84.20	20.0	68.9	ND	ND		100	WG1905504
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1905504
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1905504
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1905504
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1905504
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1905504
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1905504
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1905504
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1905504
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1905504
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1905504
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1905504
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1905504
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1905504
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1905504
Ethanol	64-17-5	46.10	125	236	1860	3510		100	WG1905504
Ethylbenzene	100-41-4	106	20.0	86.7	ND	ND		100	WG1905504
4-Ethyltoluene	622-96-8	120	20.0	98.2	49.1	241		100	WG1905504
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1905504
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1905504
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1905504
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1905504
Heptane	142-82-5	100	2000	8180	73200	299000		10000	WG1906235
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1905504
n-Hexane	110-54-3	86.20	6300	22200	541000	1910000		10000	WG1906235
Isopropylbenzene	98-82-8	120.20	20.0	98.3	ND	ND		100	WG1905504
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1905504
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1905504
2-Butanone (MEK)	78-93-3	72.10	125	369	3250	9580		100	WG1905504
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1905504
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1905504
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1905504
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1905504
2-Propanol	67-63-0	60.10	125	307	21200	52100	E	100	WG1905504
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1905504
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1905504
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1905504
Tetrachloroethylene	127-18-4	166	20.0	136	217	1470		100	WG1905504
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1905504
Toluene	108-88-3	92.10	50.0	188	ND	ND		100	WG1905504
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1905504

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected date/time: 08/01/22 11:13

L1521203

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	WG1905504
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1905504
Trichloroethylene	79-01-6	131	20.0	107	67.3	361		100	WG1905504
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	71.3	350		100	WG1905504
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	108	530		100	WG1905504
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1905504
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1905504
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1905504
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1905504
m&p-Xylene	1330-20-7	106	40.0	173	ND	ND		100	WG1905504
o-Xylene	95-47-6	106	20.0	86.7	42.9	186		100	WG1905504
TPH (GC/MS) Low Fraction	8006-61-9	101	2000000	8260000	ND	ND		10000	WG1906235
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1905504
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.3				WG1906235

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Collected date/time: 08/01/22 12:20

L1521203

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	28.4	67.5		1	WG1905504
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1905504
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1905504
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1905504
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1905504
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1905504
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1905504
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1905504
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.757	2.36		1	WG1905504
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1905504
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1905504
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1905504
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1905504
Chloromethane	74-87-3	50.50	0.200	0.413	0.789	1.63		1	WG1905504
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1905504
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1905504
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1905504
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1905504
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1905504
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1905504
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1905504
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1905504
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1905504
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1905504
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1905504
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1905504
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1905504
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1905504
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1905504
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1905504
Ethanol	64-17-5	46.10	1.25	2.36	51.8	97.7		1	WG1905504
Ethylbenzene	100-41-4	106	0.200	0.867	0.869	3.77		1	WG1905504
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.481	2.36		1	WG1905504
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1905504
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.394	1.95		1	WG1905504
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1905504
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1905504
Heptane	142-82-5	100	0.200	0.818	78.5	321		1	WG1905504
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1905504
n-Hexane	110-54-3	86.20	6.30	22.2	253	892		10	WG1906235
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1905504
Methylene Chloride	75-09-2	84.90	0.200	0.694	4.87	16.9		1	WG1905504
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1905504
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	9.47	27.9		1	WG1905504
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	2.93	12.0		1	WG1905504
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1905504
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1905504
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1905504
2-Propanol	67-63-0	60.10	1.25	3.07	23.6	58.0		1	WG1905504
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1905504
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1905504
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1905504
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1905504
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1905504
Toluene	108-88-3	92.10	0.500	1.88	10.8	40.7		1	WG1905504
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1905504

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

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L1521203

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	WG1905504
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1905504
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1905504
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.879	4.31		1	WG1905504
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.11	5.45		1	WG1905504
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1905504
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1905504
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1905504
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1905504
m&p-Xylene	1330-20-7	106	0.400	1.73	2.23	9.67		1	WG1905504
o-Xylene	95-47-6	106	0.200	0.867	1.17	5.07		1	WG1905504
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	2230	9210		1	WG1905504
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.0				WG1905504
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.1				WG1906235

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Collected date/time: 08/01/22 13:28

L1521203

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	221	525	E	1	WG1905504
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1905504
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1905504
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1905504
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1905504
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1905504
Bromomethane	74-83-9	94.90	0.200	0.776	0.226	0.877		1	WG1905504
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1905504
Carbon disulfide	75-15-0	76.10	0.200	0.622	3.23	10.1		1	WG1905504
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1905504
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1905504
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1905504
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1905504
Chloromethane	74-87-3	50.50	0.200	0.413	1.70	3.51		1	WG1905504
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1905504
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1905504
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1905504
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1905504
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1905504
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1905504
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1905504
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1905504
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1905504
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1905504
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1905504
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1905504
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1905504
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1905504
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1905504
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1905504
Ethanol	64-17-5	46.10	1.25	2.36	19.6	37.0		1	WG1905504
Ethylbenzene	100-41-4	106	0.200	0.867	0.739	3.20		1	WG1905504
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.875	4.29		1	WG1905504
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1905504
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.399	1.97		1	WG1905504
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1905504
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1905504
Heptane	142-82-5	100	0.200	0.818	64.9	265		1	WG1905504
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1905504
n-Hexane	110-54-3	86.20	6.30	22.2	343	1210		10	WG1906235
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.287	1.41		1	WG1905504
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1905504
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	40.1	164		1	WG1905504
2-Butanone (MEK)	78-93-3	72.10	12.5	36.9	186	548		10	WG1906235
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	20.7	84.7		1	WG1905504
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1905504
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1905504
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1905504
2-Propanol	67-63-0	60.10	1.25	3.07	96.6	237		1	WG1905504
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1905504
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1905504
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1905504
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1905504
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1905504
Toluene	108-88-3	92.10	0.500	1.88	0.946	3.56		1	WG1905504
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1905504



Collected date/time: 08/01/22 13:28

L1521203

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	WG1905504
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1905504
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1905504
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.72	8.44		1	WG1905504
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.76	8.64		1	WG1905504
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1905504
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1905504
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1905504
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1905504
m&p-Xylene	1330-20-7	106	0.400	1.73	1.19	5.16		1	WG1905504
o-Xylene	95-47-6	106	0.200	0.867	0.673	2.92		1	WG1905504
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	2950	12200		1	WG1905504
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		102				WG1905504
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1906235

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 08/01/22 14:35

L1521203

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	2150	5110	E	20	WG1905504
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG1905504
Benzene	71-43-2	78.10	4.00	12.8	ND	ND		20	WG1905504
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG1905504
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG1905504
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG1905504
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG1905504
1,3-Butadiene	106-99-0	54.10	40.0	88.5	ND	ND		20	WG1905504
Carbon disulfide	75-15-0	76.10	4.00	12.4	45.0	140		20	WG1905504
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG1905504
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG1905504
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG1905504
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG1905504
Chloromethane	74-87-3	50.50	4.00	8.26	17.6	36.4		20	WG1905504
2-Chlorotoluene	95-49-8	126	4.00	20.6	ND	ND		20	WG1905504
Cyclohexane	110-82-7	84.20	4.00	13.8	ND	ND		20	WG1905504
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG1905504
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG1905504
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG1905504
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG1905504
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG1905504
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG1905504
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG1905504
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG1905504
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG1905504
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG1905504
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG1905504
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG1905504
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG1905504
1,4-Dioxane	123-91-1	88.10	4.00	14.4	ND	ND		20	WG1905504
Ethanol	64-17-5	46.10	25.0	47.1	114	215		20	WG1905504
Ethylbenzene	100-41-4	106	4.00	17.3	ND	ND		20	WG1905504
4-Ethyltoluene	622-96-8	120	4.00	19.6	21.3	105		20	WG1905504
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG1905504
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG1905504
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	4.00	30.7	ND	ND		20	WG1905504
1,2-Dichlorotetrafluoroethane	76-14-2	171	4.00	28.0	ND	ND		20	WG1905504
Heptane	142-82-5	100	80.0	327	3660	15000		400	WG1906235
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG1905504
n-Hexane	110-54-3	86.20	252	888	11100	39100		400	WG1906235
Isopropylbenzene	98-82-8	120.20	4.00	19.7	ND	ND		20	WG1905504
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG1905504
Methyl Butyl Ketone	591-78-6	100	25.0	102	250	1020		20	WG1905504
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	1290	3800		20	WG1905504
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	132	540		20	WG1905504
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG1905504
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG1905504
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG1905504
2-Propanol	67-63-0	60.10	25.0	61.5	1030	2530		20	WG1905504
Propene	115-07-1	42.10	25.0	43.0	ND	ND		20	WG1905504
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG1905504
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG1905504
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG1905504
Tetrahydrofuran	109-99-9	72.10	4.00	11.8	ND	ND		20	WG1905504
Toluene	108-88-3	92.10	10.0	37.7	ND	ND		20	WG1905504
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG1905504



Collected date/time: 08/01/22 14:35

L1521203

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	WG1905504
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG1905504
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG1905504
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	33.2	163		20	WG1905504
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	46.3	227		20	WG1905504
2,2,4-Trimethylpentane	540-84-1	114.22	4.00	18.7	ND	ND		20	WG1905504
Vinyl chloride	75-01-4	62.50	4.00	10.2	ND	ND		20	WG1905504
Vinyl Bromide	593-60-2	106.95	4.00	17.5	ND	ND		20	WG1905504
Vinyl acetate	108-05-4	86.10	4.00	14.1	ND	ND		20	WG1905504
m&p-Xylene	1330-20-7	106	8.00	34.7	12.4	53.8		20	WG1905504
o-Xylene	95-47-6	106	4.00	17.3	12.9	55.9		20	WG1905504
TPH (GC/MS) Low Fraction	8006-61-9	101	80000	330000	ND	ND		400	WG1906235
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1905504
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.7				WG1906235

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

L1521203-01,02,03,04

Method Blank (MB)

(MB) R3823009-3 08/04/22 09:52

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1521203-01,02,03,04

Method Blank (MB)

(MB) R3823009-3 08/04/22 09:52

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	0.238	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	96.8			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3823009-1 08/04/22 08:37 • (LCSD) R3823009-2 08/04/22 09:15

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	3.81	3.91	102	104	70.0-130			2.59	25
Allyl Chloride	3.75	3.94	3.92	105	105	70.0-130			0.509	25
Benzene	3.75	3.84	3.84	102	102	70.0-130			0.000	25
Benzyl Chloride	3.75	3.87	3.89	103	104	70.0-152			0.515	25
Bromodichloromethane	3.75	3.69	3.74	98.4	99.7	70.0-130			1.35	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3823009-1 08/04/22 08:37 • (LCSD) R3823009-2 08/04/22 09:15

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	3.78	3.78	101	101	70.0-130			0.000	25
Bromomethane	3.75	3.80	3.88	101	103	70.0-130			2.08	25
1,3-Butadiene	3.75	3.57	3.71	95.2	98.9	70.0-130			3.85	25
Carbon disulfide	3.75	3.86	3.79	103	101	70.0-130			1.83	25
Carbon tetrachloride	3.75	3.81	3.75	102	100	70.0-130			1.59	25
Chlorobenzene	3.75	3.76	3.80	100	101	70.0-130			1.06	25
Chloroethane	3.75	3.65	3.78	97.3	101	70.0-130			3.50	25
Chloroform	3.75	3.80	3.78	101	101	70.0-130			0.528	25
Chloromethane	3.75	3.70	3.81	98.7	102	70.0-130			2.93	25
2-Chlorotoluene	3.75	3.87	3.84	103	102	70.0-130			0.778	25
Cyclohexane	3.75	4.03	4.10	107	109	70.0-130			1.72	25
Dibromochloromethane	3.75	3.68	3.76	98.1	100	70.0-130			2.15	25
1,2-Dibromoethane	3.75	3.76	3.84	100	102	70.0-130			2.11	25
1,2-Dichlorobenzene	3.75	3.81	3.89	102	104	70.0-130			2.08	25
1,3-Dichlorobenzene	3.75	3.98	3.96	106	106	70.0-130			0.504	25
1,4-Dichlorobenzene	3.75	4.05	4.02	108	107	70.0-130			0.743	25
1,2-Dichloroethane	3.75	3.67	3.69	97.9	98.4	70.0-130			0.543	25
1,1-Dichloroethane	3.75	3.90	3.85	104	103	70.0-130			1.29	25
1,1-Dichloroethene	3.75	3.89	3.90	104	104	70.0-130			0.257	25
cis-1,2-Dichloroethene	3.75	3.53	3.57	94.1	95.2	70.0-130			1.13	25
trans-1,2-Dichloroethene	3.75	3.93	3.93	105	105	70.0-130			0.000	25
1,2-Dichloropropane	3.75	3.74	3.78	99.7	101	70.0-130			1.06	25
cis-1,3-Dichloropropene	3.75	3.87	3.89	103	104	70.0-130			0.515	25
trans-1,3-Dichloropropene	3.75	3.70	3.77	98.7	101	70.0-130			1.87	25
1,4-Dioxane	3.75	3.73	3.72	99.5	99.2	70.0-140			0.268	25
Ethanol	3.75	3.65	3.55	97.3	94.7	55.0-148			2.78	25
Ethylbenzene	3.75	3.82	3.84	102	102	70.0-130			0.522	25
4-Ethyltoluene	3.75	3.93	3.92	105	105	70.0-130			0.255	25
Trichlorofluoromethane	3.75	3.68	3.69	98.1	98.4	70.0-130			0.271	25
Dichlorodifluoromethane	3.75	3.74	3.87	99.7	103	64.0-139			3.42	25
1,1,2-Trichlorotrifluoroethane	3.75	3.81	3.86	102	103	70.0-130			1.30	25
1,2-Dichlorotetrafluoroethane	3.75	3.77	3.79	101	101	70.0-130			0.529	25
Heptane	3.75	4.55	4.60	121	123	70.0-130			1.09	25
Hexachloro-1,3-butadiene	3.75	3.79	3.82	101	102	70.0-151			0.788	25
Isopropylbenzene	3.75	3.94	3.96	105	106	70.0-130			0.506	25
Methylene Chloride	3.75	3.67	3.76	97.9	100	70.0-130			2.42	25
Methyl Butyl Ketone	3.75	3.72	3.79	99.2	101	70.0-149			1.86	25
Methyl Ethyl Ketone	3.75	3.74	3.90	99.7	104	70.0-130			4.19	25
4-Methyl-2-pentanone (MIBK)	3.75	3.81	3.80	102	101	70.0-139			0.263	25
Methyl Methacrylate	3.75	3.82	3.81	102	102	70.0-130			0.262	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3823009-1 08/04/22 08:37 • (LCSD) R3823009-2 08/04/22 09:15

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	3.82	3.85	102	103	70.0-130			0.782	25
Naphthalene	3.75	3.81	3.80	102	101	70.0-159			0.263	25
2-Propanol	3.75	3.73	3.78	99.5	101	70.0-139			1.33	25
Propene	3.75	3.85	3.89	103	104	64.0-144			1.03	25
Styrene	3.75	4.05	4.06	108	108	70.0-130			0.247	25
1,1,2,2-Tetrachloroethane	3.75	3.80	3.79	101	101	70.0-130			0.264	25
Tetrachloroethylene	3.75	3.73	3.75	99.5	100	70.0-130			0.535	25
Tetrahydrofuran	3.75	3.82	3.81	102	102	70.0-137			0.262	25
Toluene	3.75	3.80	3.92	101	105	70.0-130			3.11	25
1,2,4-Trichlorobenzene	3.75	3.87	3.90	103	104	70.0-160			0.772	25
1,1,1-Trichloroethane	3.75	3.76	3.77	100	101	70.0-130			0.266	25
1,1,2-Trichloroethane	3.75	3.69	3.83	98.4	102	70.0-130			3.72	25
Trichloroethylene	3.75	3.76	3.80	100	101	70.0-130			1.06	25
1,2,4-Trimethylbenzene	3.75	3.95	3.96	105	106	70.0-130			0.253	25
1,3,5-Trimethylbenzene	3.75	3.90	3.94	104	105	70.0-130			1.02	25
2,2,4-Trimethylpentane	3.75	4.04	4.00	108	107	70.0-130			0.995	25
Vinyl chloride	3.75	3.65	3.71	97.3	98.9	70.0-130			1.63	25
Vinyl Bromide	3.75	3.76	3.77	100	101	70.0-130			0.266	25
Vinyl acetate	3.75	3.76	3.84	100	102	70.0-130			2.11	25
m&p-Xylene	7.50	7.92	7.84	106	105	70.0-130			1.02	25
o-Xylene	3.75	3.90	3.93	104	105	70.0-130			0.766	25
TPH (GC/MS) Low Fraction	203	218	218	107	107	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				101	101	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

Method Blank (MB)

(MB) R3823122-3 08/05/22 10:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
2-Butanone (MEK)	U		0.0814	1.25
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	96.0			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3823122-1 08/05/22 08:53 • (LCSD) R3823122-2 08/05/22 09:36

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Heptane	3.75	3.73	3.63	99.5	96.8	70.0-130			2.72	25
n-Hexane	3.75	3.63	3.62	96.8	96.5	70.0-130			0.276	25
Methyl Ethyl Ketone	3.75	3.57	3.59	95.2	95.7	70.0-130			0.559	25
TPH (GC/MS) Low Fraction	203	200	202	98.5	99.5	70.0-130			0.995	25
(S) 1,4-Bromofluorobenzene				101	102	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

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.



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:

Ensolum, LLC

601 N Marienfeld Street, Ste. 400
Midland, TX 79701

Billing Information:

Accounts Payable
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

Analysis

Chain of Custody Page 1 of 1

Report To:

Beaux Jennings

Email To:

bjennings@ensolum.com

Project

Description: *Levey Well*

City/State

Collected: *Hobbs NM*

Please Circle:

PT MT CT ET

Phone:

210-219-8858

Client Project #

0381417001

Lab Project #

ENSOLUMTX-SUMMA

Collected by (print):

SHANE DILLER

Site/Facility ID #

0381417001

P.O. #

0381417001

Collected by (signature):

Shane Diller

Rush? (Lab MUST Be Notified)

☐ Same Day ☒ Three Day
☐ Next Day ☐ Five Day
☐ Two Day

Date Results Needed

Collection

Canister Pressure/Vacuum

Sample ID

Can #

Flow Cont. #

Date

Time

Initial

Final

TO-15 Summa

Levey Well
Levey Well
Levey Well
*Levey Well**8-1-22 1113*
8-1-22 1220
8-1-22 1328
*8-1-22 1435**X*
X
X
*X**-01*
-02
-03
-04

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☒ N If Applicable
COC Signed/Accurate: ☒ Y ☒ N VOA Zero Headspace: ☒ Y ☒ N
Bottles arrive intact: ☒ Y ☒ N Pres. Correct/Check: ☒ Y ☒ N
Correct bottles used: ☒ Y ☒ N
Sufficient volume sent: ☒ Y ☒ N
RAD Screen <0.5 mR/hr: ☒ Y ☒ N

Ref.

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

Hold #

Received by: (Signature)

Shane Diller

Date:

Time:

Condition:

(lab use only)

Received by: (Signature)

C. B.

Date:

Time:

COC Seal Intact: ☐ Y ☐ N ☐ NA

Received for lab by: (Signature)

FedEx V. S. Smith

Date:

Time:

NCF:



ANALYTICAL REPORT

August 14, 2022

Ensolum, LLC

Sample Delivery Group: L1523588
Samples Received: 08/10/2022
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 blue ink signature of Mark W. Beasley, written in a cursive style.

Mark W. Beasley
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

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LEVEY WELL L1523588-01 Air

Collected by
Shane Diller

Collected date/time
08/04/22 13:58

Received date/time
08/10/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1909283	80	08/11/22 22:36	08/11/22 22:36	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1909888	2000	08/13/22 06:41	08/13/22 06:41	DAH	Mt. Juliet, TN

¹Cp

²Tc

³Ss

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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.



Mark W. Beasley
Project Manager

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ 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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National			LRC Date: 08/14/2022 16:11				
Project Name: Levey Well			Laboratory Job Number: L1523588-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1909888 and WG1909283				
# 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: 08/14/2022 16:11				
Project Name: Levey Well			Laboratory Job Number: L1523588-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1909888 and WG1909283				
# 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: 08/14/2022 16:11	
Project Name: Levey Well		Laboratory Job Number: L1523588-01	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1909888 and WG1909283	
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: 08/04/22 13:58

L1523588

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	100	238	ND	ND		80	WG1909283
Allyl chloride	107-05-1	76.53	16.0	50.1	ND	ND		80	WG1909283
Benzene	71-43-2	78.10	16.0	51.1	ND	ND		80	WG1909283
Benzyl Chloride	100-44-7	127	16.0	83.1	ND	ND		80	WG1909283
Bromodichloromethane	75-27-4	164	16.0	107	ND	ND		80	WG1909283
Bromoform	75-25-2	253	48.0	497	ND	ND		80	WG1909283
Bromomethane	74-83-9	94.90	16.0	62.1	ND	ND		80	WG1909283
1,3-Butadiene	106-99-0	54.10	160	354	ND	ND		80	WG1909283
Carbon disulfide	75-15-0	76.10	16.0	49.8	73.7	229		80	WG1909283
Carbon tetrachloride	56-23-5	154	16.0	101	ND	ND		80	WG1909283
Chlorobenzene	108-90-7	113	16.0	73.9	ND	ND		80	WG1909283
Chloroethane	75-00-3	64.50	16.0	42.2	ND	ND		80	WG1909283
Chloroform	67-66-3	119	16.0	77.9	ND	ND		80	WG1909283
Chloromethane	74-87-3	50.50	16.0	33.0	ND	ND		80	WG1909283
2-Chlorotoluene	95-49-8	126	16.0	82.5	ND	ND		80	WG1909283
Cyclohexane	110-82-7	84.20	400	1380	14400	49600		2000	WG1909888
Dibromochloromethane	124-48-1	208	16.0	136	ND	ND		80	WG1909283
1,2-Dibromoethane	106-93-4	188	16.0	123	ND	ND		80	WG1909283
1,2-Dichlorobenzene	95-50-1	147	16.0	96.2	ND	ND		80	WG1909283
1,3-Dichlorobenzene	541-73-1	147	16.0	96.2	ND	ND		80	WG1909283
1,4-Dichlorobenzene	106-46-7	147	16.0	96.2	ND	ND		80	WG1909283
1,2-Dichloroethane	107-06-2	99	16.0	64.8	ND	ND		80	WG1909283
1,1-Dichloroethane	75-34-3	98	16.0	64.1	118	473		80	WG1909283
1,1-Dichloroethene	75-35-4	96.90	16.0	63.4	ND	ND		80	WG1909283
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	ND	ND		80	WG1909283
trans-1,2-Dichloroethene	156-60-5	96.90	16.0	63.4	ND	ND		80	WG1909283
1,2-Dichloropropane	78-87-5	113	16.0	73.9	ND	ND		80	WG1909283
cis-1,3-Dichloropropene	10061-01-5	111	16.0	72.6	ND	ND		80	WG1909283
trans-1,3-Dichloropropene	10061-02-6	111	16.0	72.6	ND	ND		80	WG1909283
1,4-Dioxane	123-91-1	88.10	16.0	57.7	ND	ND		80	WG1909283
Ethanol	64-17-5	46.10	100	189	891	1680		80	WG1909283
Ethylbenzene	100-41-4	106	16.0	69.4	ND	ND		80	WG1909283
4-Ethyltoluene	622-96-8	120	16.0	78.5	22.8	112		80	WG1909283
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	ND	ND		80	WG1909283
Dichlorodifluoromethane	75-71-8	120.92	16.0	79.1	ND	ND		80	WG1909283
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	16.0	123	ND	ND		80	WG1909283
1,2-Dichlorotetrafluoroethane	76-14-2	171	16.0	112	ND	ND		80	WG1909283
Heptane	142-82-5	100	400	1640	24700	101000		2000	WG1909888
Hexachloro-1,3-butadiene	87-68-3	261	50.4	538	ND	ND		80	WG1909283
n-Hexane	110-54-3	86.20	1260	4440	161000	568000		2000	WG1909888
Isopropylbenzene	98-82-8	120.20	16.0	78.7	ND	ND		80	WG1909283
Methylene Chloride	75-09-2	84.90	16.0	55.6	38.9	135		80	WG1909283
Methyl Butyl Ketone	591-78-6	100	100	409	ND	ND		80	WG1909283
2-Butanone (MEK)	78-93-3	72.10	2500	7370	ND	ND		2000	WG1909888
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	100	409	ND	ND		80	WG1909283
Methyl methacrylate	80-62-6	100.12	16.0	65.5	ND	ND		80	WG1909283
MTBE	1634-04-4	88.10	16.0	57.7	ND	ND		80	WG1909283
Naphthalene	91-20-3	128	50.4	264	ND	ND		80	WG1909283
2-Propanol	67-63-0	60.10	100	246	7170	17600		80	WG1909283
Propene	115-07-1	42.10	100	172	ND	ND		80	WG1909283
Styrene	100-42-5	104	16.0	68.1	ND	ND		80	WG1909283
1,1,2,2-Tetrachloroethane	79-34-5	168	16.0	110	ND	ND		80	WG1909283
Tetrachloroethylene	127-18-4	166	16.0	109	ND	ND		80	WG1909283
Tetrahydrofuran	109-99-9	72.10	16.0	47.2	ND	ND		80	WG1909283
Toluene	108-88-3	92.10	40.0	151	ND	ND		80	WG1909283
1,2,4-Trichlorobenzene	120-82-1	181	50.4	373	ND	ND		80	WG1909283

1 Cp
2 Tc
3 Ss
4 Cn
5 Tr
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Collected date/time: 08/04/22 13:58

L1523588

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	16.0	87.0	ND	ND		80	WG1909283
1,1,2-Trichloroethane	79-00-5	133	16.0	87.0	ND	ND		80	WG1909283
Trichloroethylene	79-01-6	131	16.0	85.7	ND	ND		80	WG1909283
1,2,4-Trimethylbenzene	95-63-6	120	16.0	78.5	25.6	126		80	WG1909283
1,3,5-Trimethylbenzene	108-67-8	120	16.0	78.5	51.2	251		80	WG1909283
2,2,4-Trimethylpentane	540-84-1	114.22	16.0	74.7	ND	ND		80	WG1909283
Vinyl chloride	75-01-4	62.50	16.0	40.9	ND	ND		80	WG1909283
Vinyl Bromide	593-60-2	106.95	16.0	70.0	ND	ND		80	WG1909283
Vinyl acetate	108-05-4	86.10	16.0	56.3	ND	ND		80	WG1909283
m&p-Xylene	1330-20-7	106	32.0	139	ND	ND		80	WG1909283
o-Xylene	95-47-6	106	16.0	69.4	24.9	108		80	WG1909283
TPH (GC/MS) Low Fraction	8006-61-9	101	400000	1650000	740000	3060000		2000	WG1909888
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1909283
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.0				WG1909888

¹Cp²Tc³Ss⁴Cn⁵Tr⁶Sr⁷Qc⁸Gl⁹Al¹⁰Sc

Method Blank (MB)

(MB) R3825700-3 08/11/22 09:36

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

L1523588-01

Method Blank (MB)

(MB) R3825700-3 08/11/22 09:36

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
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	0.214	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	97.2			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3825700-1 08/11/22 08:36 • (LCSD) R3825700-2 08/11/22 09:07

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	4.59	3.95	122	105	70.0-130			15.0	25
Allyl Chloride	3.75	4.40	4.24	117	113	70.0-130			3.70	25
Benzene	3.75	3.83	3.75	102	100	70.0-130			2.11	25
Benzyl Chloride	3.75	3.90	3.82	104	102	70.0-152			2.07	25
Bromodichloromethane	3.75	3.81	3.73	102	99.5	70.0-130			2.12	25
Bromoform	3.75	3.74	3.73	99.7	99.5	70.0-130			0.268	25
Bromomethane	3.75	4.28	4.13	114	110	70.0-130			3.57	25
1,3-Butadiene	3.75	4.21	4.16	112	111	70.0-130			1.19	25
Carbon disulfide	3.75	4.43	4.32	118	115	70.0-130			2.51	25

Volatile Organic Compounds (MS) by Method TO-15

L1523588-01

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3825700-1 08/11/22 08:36 • (LCSD) R3825700-2 08/11/22 09:07

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	3.75	4.11	4.03	110	107	70.0-130			1.97	25
Chlorobenzene	3.75	3.82	3.78	102	101	70.0-130			1.05	25
Chloroethane	3.75	4.27	4.23	114	113	70.0-130			0.941	25
Chloroform	3.75	4.23	4.11	113	110	70.0-130			2.88	25
Chloromethane	3.75	4.35	4.20	116	112	70.0-130			3.51	25
2-Chlorotoluene	3.75	3.74	3.71	99.7	98.9	70.0-130			0.805	25
Dibromochloromethane	3.75	3.78	3.73	101	99.5	70.0-130			1.33	25
1,2-Dibromoethane	3.75	3.78	3.72	101	99.2	70.0-130			1.60	25
1,2-Dichlorobenzene	3.75	3.83	3.78	102	101	70.0-130			1.31	25
1,3-Dichlorobenzene	3.75	3.89	3.81	104	102	70.0-130			2.08	25
1,4-Dichlorobenzene	3.75	3.89	3.87	104	103	70.0-130			0.515	25
1,2-Dichloroethane	3.75	3.83	3.76	102	100	70.0-130			1.84	25
1,1-Dichloroethane	3.75	4.20	4.05	112	108	70.0-130			3.64	25
1,1-Dichloroethene	3.75	4.26	4.18	114	111	70.0-130			1.90	25
cis-1,2-Dichloroethene	3.75	4.25	4.09	113	109	70.0-130			3.84	25
trans-1,2-Dichloroethene	3.75	4.37	4.27	117	114	70.0-130			2.31	25
1,2-Dichloropropane	3.75	3.84	3.77	102	101	70.0-130			1.84	25
cis-1,3-Dichloropropene	3.75	3.76	3.70	100	98.7	70.0-130			1.61	25
trans-1,3-Dichloropropene	3.75	3.75	3.72	100	99.2	70.0-130			0.803	25
1,4-Dioxane	3.75	3.88	3.83	103	102	70.0-140			1.30	25
Ethanol	3.75	4.43	4.21	118	112	55.0-148			5.09	25
Ethylbenzene	3.75	3.69	3.68	98.4	98.1	70.0-130			0.271	25
4-Ethyltoluene	3.75	3.84	3.79	102	101	70.0-130			1.31	25
Trichlorofluoromethane	3.75	4.29	4.20	114	112	70.0-130			2.12	25
Dichlorodifluoromethane	3.75	4.28	4.22	114	113	64.0-139			1.41	25
1,1,2-Trichlorotrifluoroethane	3.75	4.36	4.25	116	113	70.0-130			2.56	25
1,2-Dichlorotetrafluoroethane	3.75	4.41	4.28	118	114	70.0-130			2.99	25
Hexachloro-1,3-butadiene	3.75	3.92	3.86	105	103	70.0-151			1.54	25
Isopropylbenzene	3.75	3.75	3.75	100	100	70.0-130			0.000	25
Methylene Chloride	3.75	4.32	4.19	115	112	70.0-130			3.06	25
Methyl Butyl Ketone	3.75	3.87	3.77	103	101	70.0-149			2.62	25
4-Methyl-2-pentanone (MIBK)	3.75	3.99	3.93	106	105	70.0-139			1.52	25
Methyl Methacrylate	3.75	3.73	3.70	99.5	98.7	70.0-130			0.808	25
MTBE	3.75	4.21	4.13	112	110	70.0-130			1.92	25
Naphthalene	3.75	4.09	4.05	109	108	70.0-159			0.983	25
2-Propanol	3.75	4.26	4.19	114	112	70.0-139			1.66	25
Propene	3.75	4.20	4.13	112	110	64.0-144			1.68	25
Styrene	3.75	3.76	3.68	100	98.1	70.0-130			2.15	25
1,1,2,2-Tetrachloroethane	3.75	3.81	3.80	102	101	70.0-130			0.263	25
Tetrachloroethylene	3.75	3.79	3.77	101	101	70.0-130			0.529	25

1

Cp

2

Tc

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Ss

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Cn

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Tr

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Sr

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Qc

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Gl

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Al

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Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3825700-1 08/11/22 08:36 • (LCSD) R3825700-2 08/11/22 09:07

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 %
Tetrahydrofuran	3.75	4.23	4.11	113	110	70.0-137			2.88	25
Toluene	3.75	3.73	3.73	99.5	99.5	70.0-130			0.000	25
1,2,4-Trichlorobenzene	3.75	4.03	3.98	107	106	70.0-160			1.25	25
1,1,1-Trichloroethane	3.75	4.16	4.05	111	108	70.0-130			2.68	25
1,1,2-Trichloroethane	3.75	3.77	3.71	101	98.9	70.0-130			1.60	25
Trichloroethylene	3.75	3.84	3.77	102	101	70.0-130			1.84	25
1,2,4-Trimethylbenzene	3.75	3.97	3.94	106	105	70.0-130			0.759	25
1,3,5-Trimethylbenzene	3.75	3.89	3.83	104	102	70.0-130			1.55	25
2,2,4-Trimethylpentane	3.75	4.24	4.14	113	110	70.0-130			2.39	25
Vinyl chloride	3.75	4.31	4.23	115	113	70.0-130			1.87	25
Vinyl Bromide	3.75	4.23	4.17	113	111	70.0-130			1.43	25
Vinyl acetate	3.75	4.08	4.00	109	107	70.0-130			1.98	25
m&p-Xylene	7.50	7.75	7.69	103	103	70.0-130			0.777	25
o-Xylene	3.75	3.83	3.80	102	101	70.0-130			0.786	25
(S) 1,4-Bromofluorobenzene				98.9	98.7	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1523588-01

Method Blank (MB)

(MB) R3825674-3 08/12/22 10:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
2-Butanone (MEK)	U		0.0814	1.25
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	95.7			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3825674-1 08/12/22 08:43 • (LCSD) R3825674-2 08/12/22 09:24

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	4.11	4.18	110	111	70.0-130			1.69	25
Heptane	3.75	4.30	4.30	115	115	70.0-130			0.000	25
n-Hexane	3.75	4.03	4.13	107	110	70.0-130			2.45	25
Methyl Ethyl Ketone	3.75	4.26	4.25	114	113	70.0-130			0.235	25
TPH (GC/MS) Low Fraction	203	244	247	120	122	70.0-130			1.22	25
(S) 1,4-Bromofluorobenzene				96.4	96.6	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.



Ensolum, LLC

601 Marienfeld #400
Midland, TX 79701Report to:
Beaux Jennings

Project Description:

Levey Well

Phone: 210-219-8858

Client Project #

03B1417001

Collected by (print):

Shane Diller

Site/Facility ID #

03B1417001

Collected by (signature):

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☒ Three Day

 Immediately
 Packed on Ice N ☒ Y ☐

Billing Information:

 Accounts Payable
 2351 W Northwest Hwy. Ste.
 1203
 Dallas, TX 75220
Pres
Chk

Email To: bjennings@ensolum.com

Please Circle:
PT MT CT ET

Lab Project #

ENSOLUMTX-SUMMA

P.O. #

03B1417001

Quote #

Date Results Needed

No.
of
Cnts

Analysis / Container / Preservative

Chain of Custody

Page ___ of ___


 12065 Lebanon Road Mt Juliet, TN 37122
 Phone: 615-758-5858 Alt: 800-767-5859
 Submitting a sample via this chain of custody
 constitutes acknowledgment and acceptance of the
 Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubs/pas-standard-terms.pdf>

SDG #

L1523588

A194

Acctnum: ENSOLUMTX

Template: T180734

Prelogin: P827709

PM: 134 - Mark W. Beasley

PB:

Shipped Via:

Remarks

Sample # (lab only)

Levey Well

G

Air

8-4-22 1358

1

X

 NFE
 8-4-22
 11

 Sample Receipt Checklist
 COC Seal Present/Intact: ☒ Y ☐ N If Applicable
 COC Signed/Accurate: ☒ Y ☐ N VOA Zero Headspace: ☒ Y ☐ N
 Bottles arrive intact: ☒ Y ☐ N Pres. Correct/Check: ☒ Y ☐ N
 Correct bottles used: ☒ Y ☐ N
 Sufficient volume sent: ☒ Y ☐ N
 RAD Screen <0.5 mR/hr: ☒ Y ☐ N

* Matrix:

 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

5719 6177 8190

Relinquished by: (Signature)

Date:

8-9-22

Time:

1000

Received by: (Signature)

CWR

Trip Blank Received: Yes / No

HCL/MeOH
TBR

Relinquished by: (Signature)

Date:

8-9-22

Time:

1700

Received by: (Signature)

Fidex

Temp: °C Bottles Received:

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

CWR

Date:

Time:

Hold:

Condition:

NCF / OK

Sample Receipt Checklist

 COC Seal Present/Intact: ☒ Y ☐ N
 COC Signed/Accurate: ☒ Y ☐ N
 Bottles arrive intact: ☒ Y ☐ N
 Correct bottles used: ☒ Y ☐ N
 Sufficient volume sent: ☒ Y ☐ N
 If Applicable
 VOA Zero Headspace: ☒ Y ☐ N
 Preservation Correct/Checked: ☒ Y ☐ N
 RAD Screen <0.5 mR/hr: ☒ Y ☐ N



ANALYTICAL REPORT

August 17, 2022

Ensolum, LLC

Sample Delivery Group: L1524848
Samples Received: 08/12/2022
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

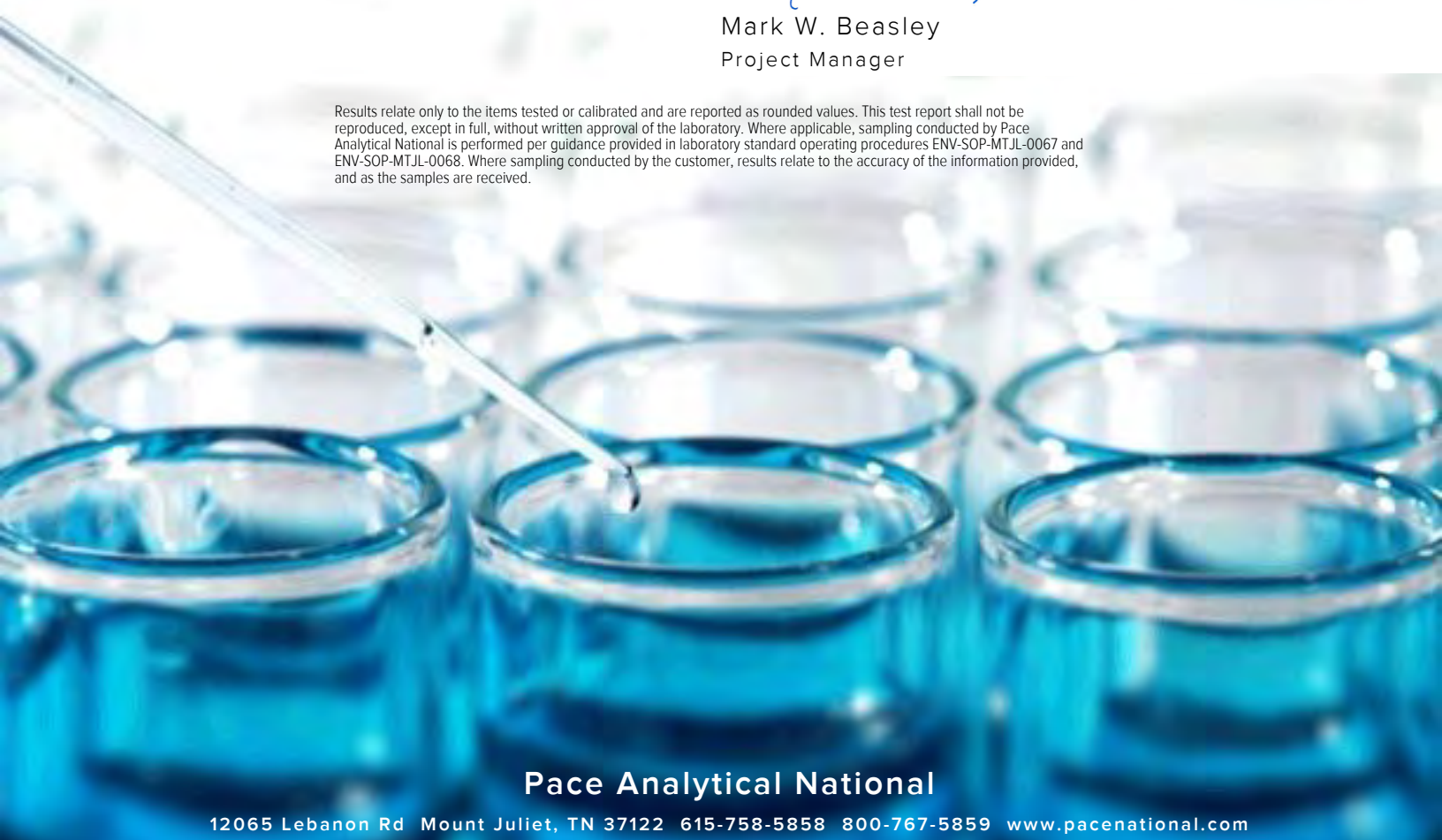


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "M. Beasley".

Mark W. Beasley
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 L1524848-01	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 L1524848-01 Air

Collected by
Shane Diller

Collected date/time
08/10/22 13:53

Received date/time
08/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1910344	80	08/13/22 19:06	08/13/22 19:06	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1911022	2000	08/15/22 23:38	08/15/22 23:38	DBB	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1911569	10000	08/16/22 14:28	08/16/22 14:28	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.



Mark W. Beasley
Project Manager

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ 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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 08/17/2022 10:48					
Project Name: Levey Well		Laboratory Job Number: L1524848-01					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1910344, WG1911022 and WG1911569					
# 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: 08/17/2022 10:48				
Project Name: Levey Well			Laboratory Job Number: L1524848-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1910344, WG1911022 and WG1911569				
# 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				
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Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 08/17/2022 10:48	
Project Name: Levey Well		Laboratory Job Number: L1524848-01	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1910344, WG1911022 and WG1911569	
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: 08/10/22 13:53

L1524848

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	100	238	ND	ND		80	WG1910344
Allyl chloride	107-05-1	76.53	16.0	50.1	ND	ND		80	WG1910344
Benzene	71-43-2	78.10	16.0	51.1	ND	ND		80	WG1910344
Benzyl Chloride	100-44-7	127	16.0	83.1	ND	ND		80	WG1910344
Bromodichloromethane	75-27-4	164	16.0	107	ND	ND		80	WG1910344
Bromoform	75-25-2	253	48.0	497	ND	ND		80	WG1910344
Bromomethane	74-83-9	94.90	16.0	62.1	ND	ND		80	WG1910344
1,3-Butadiene	106-99-0	54.10	160	354	ND	ND		80	WG1910344
Carbon disulfide	75-15-0	76.10	16.0	49.8	18.8	58.5		80	WG1910344
Carbon tetrachloride	56-23-5	154	16.0	101	ND	ND		80	WG1910344
Chlorobenzene	108-90-7	113	16.0	73.9	ND	ND		80	WG1910344
Chloroethane	75-00-3	64.50	16.0	42.2	ND	ND		80	WG1910344
Chloroform	67-66-3	119	16.0	77.9	ND	ND		80	WG1910344
Chloromethane	74-87-3	50.50	16.0	33.0	ND	ND		80	WG1910344
2-Chlorotoluene	95-49-8	126	16.0	82.5	ND	ND		80	WG1910344
Cyclohexane	110-82-7	84.20	400	1380	18900	65100		2000	WG1911022
Dibromochloromethane	124-48-1	208	16.0	136	ND	ND		80	WG1910344
1,2-Dibromoethane	106-93-4	188	16.0	123	ND	ND		80	WG1910344
1,2-Dichlorobenzene	95-50-1	147	16.0	96.2	ND	ND		80	WG1910344
1,3-Dichlorobenzene	541-73-1	147	16.0	96.2	ND	ND		80	WG1910344
1,4-Dichlorobenzene	106-46-7	147	16.0	96.2	ND	ND		80	WG1910344
1,2-Dichloroethane	107-06-2	99	16.0	64.8	ND	ND		80	WG1910344
1,1-Dichloroethane	75-34-3	98	16.0	64.1	ND	ND		80	WG1910344
1,1-Dichloroethene	75-35-4	96.90	16.0	63.4	ND	ND		80	WG1910344
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	17.5	69.4		80	WG1910344
trans-1,2-Dichloroethene	156-60-5	96.90	16.0	63.4	ND	ND		80	WG1910344
1,2-Dichloropropane	78-87-5	113	16.0	73.9	ND	ND		80	WG1910344
cis-1,3-Dichloropropene	10061-01-5	111	16.0	72.6	ND	ND		80	WG1910344
trans-1,3-Dichloropropene	10061-02-6	111	16.0	72.6	ND	ND		80	WG1910344
1,4-Dioxane	123-91-1	88.10	16.0	57.7	ND	ND		80	WG1910344
Ethanol	64-17-5	46.10	100	189	610	1150		80	WG1910344
Ethylbenzene	100-41-4	106	16.0	69.4	ND	ND		80	WG1910344
4-Ethyltoluene	622-96-8	120	16.0	78.5	ND	ND		80	WG1910344
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	ND	ND		80	WG1910344
Dichlorodifluoromethane	75-71-8	120.92	16.0	79.1	ND	ND		80	WG1910344
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	16.0	123	ND	ND		80	WG1910344
1,2-Dichlorotetrafluoroethane	76-14-2	171	16.0	112	ND	ND		80	WG1910344
Heptane	142-82-5	100	400	1640	29500	121000		2000	WG1911022
Hexachloro-1,3-butadiene	87-68-3	261	50.4	538	ND	ND		80	WG1910344
n-Hexane	110-54-3	86.20	6300	22200	339000	1200000		10000	WG1911569
Isopropylbenzene	98-82-8	120.20	16.0	78.7	ND	ND		80	WG1910344
Methylene Chloride	75-09-2	84.90	16.0	55.6	17.3	60.1		80	WG1910344
Methyl Butyl Ketone	591-78-6	100	100	409	ND	ND		80	WG1910344
2-Butanone (MEK)	78-93-3	72.10	100	295	990	2920		80	WG1910344
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	100	409	ND	ND		80	WG1910344
Methyl methacrylate	80-62-6	100.12	16.0	65.5	ND	ND		80	WG1910344
MTBE	1634-04-4	88.10	16.0	57.7	ND	ND		80	WG1910344
Naphthalene	91-20-3	128	50.4	264	ND	ND		80	WG1910344
2-Propanol	67-63-0	60.10	100	246	7020	17300		80	WG1910344
Propene	115-07-1	42.10	100	172	ND	ND		80	WG1910344
Styrene	100-42-5	104	16.0	68.1	ND	ND		80	WG1910344
1,1,2,2-Tetrachloroethane	79-34-5	168	16.0	110	ND	ND		80	WG1910344
Tetrachloroethylene	127-18-4	166	16.0	109	ND	ND		80	WG1910344
Tetrahydrofuran	109-99-9	72.10	16.0	47.2	ND	ND		80	WG1910344
Toluene	108-88-3	92.10	40.0	151	ND	ND		80	WG1910344
1,2,4-Trichlorobenzene	120-82-1	181	50.4	373	ND	ND		80	WG1910344



Collected date/time: 08/10/22 13:53

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	16.0	87.0	ND	ND		80	WG1910344
1,1,2-Trichloroethane	79-00-5	133	16.0	87.0	ND	ND		80	WG1910344
Trichloroethylene	79-01-6	131	16.0	85.7	ND	ND		80	WG1910344
1,2,4-Trimethylbenzene	95-63-6	120	16.0	78.5	ND	ND		80	WG1910344
1,3,5-Trimethylbenzene	108-67-8	120	16.0	78.5	ND	ND		80	WG1910344
2,2,4-Trimethylpentane	540-84-1	114.22	16.0	74.7	ND	ND		80	WG1910344
Vinyl chloride	75-01-4	62.50	16.0	40.9	ND	ND		80	WG1910344
Vinyl Bromide	593-60-2	106.95	16.0	70.0	ND	ND		80	WG1910344
Vinyl acetate	108-05-4	86.10	16.0	56.3	ND	ND		80	WG1910344
m&p-Xylene	1330-20-7	106	32.0	139	ND	ND		80	WG1910344
o-Xylene	95-47-6	106	16.0	69.4	ND	ND		80	WG1910344
TPH (GC/MS) Low Fraction	8006-61-9	101	16000	66100	402000	1660000		80	WG1910344
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.0				WG1910344
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.4				WG1911022
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1911569

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1524848-01

Method Blank (MB)

(MB) R3826021-3 08/13/22 07:01

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

L1524848-01

Method Blank (MB)

(MB) R3826021-3 08/13/22 07:01

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	0.206	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	68.3	U	39.7	200
(S) 1,4-Bromofluorobenzene	95.9			60.0-140

Cp

Tc

Ss

Cn

Tr

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3826021-1 08/13/22 05:59 • (LCSD) R3826021-2 08/13/22 06:32

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	4.03	3.77	107	101	70.0-130			6.67	25
Allyl Chloride	3.75	4.03	3.90	107	104	70.0-130			3.28	25
Benzene	3.75	3.75	3.65	100	97.3	70.0-130			2.70	25
Benzyl Chloride	3.75	3.83	3.74	102	99.7	70.0-152			2.38	25
Bromodichloromethane	3.75	3.71	3.62	98.9	96.5	70.0-130			2.46	25
Bromoform	3.75	3.72	3.64	99.2	97.1	70.0-130			2.17	25
Bromomethane	3.75	3.87	3.78	103	101	70.0-130			2.35	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3826021-1 08/13/22 05:59 • (LCSD) R3826021-2 08/13/22 06:32

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	3.92	3.76	105	100	70.0-130			4.17	25
Carbon disulfide	3.75	4.06	3.90	108	104	70.0-130			4.02	25
Carbon tetrachloride	3.75	3.78	3.66	101	97.6	70.0-130			3.23	25
Chlorobenzene	3.75	3.73	3.64	99.5	97.1	70.0-130			2.44	25
Chloroethane	3.75	3.87	3.77	103	101	70.0-130			2.62	25
Chloroform	3.75	3.83	3.73	102	99.5	70.0-130			2.65	25
Chloromethane	3.75	3.95	3.87	105	103	70.0-130			2.05	25
2-Chlorotoluene	3.75	3.70	3.61	98.7	96.3	70.0-130			2.46	25
Dibromochloromethane	3.75	3.68	3.59	98.1	95.7	70.0-130			2.48	25
1,2-Dibromoethane	3.75	3.68	3.55	98.1	94.7	70.0-130			3.60	25
1,2-Dichlorobenzene	3.75	3.80	3.68	101	98.1	70.0-130			3.21	25
1,3-Dichlorobenzene	3.75	3.82	3.75	102	100	70.0-130			1.85	25
1,4-Dichlorobenzene	3.75	3.86	3.77	103	101	70.0-130			2.36	25
1,2-Dichloroethane	3.75	3.73	3.66	99.5	97.6	70.0-130			1.89	25
1,1-Dichloroethane	3.75	3.83	3.73	102	99.5	70.0-130			2.65	25
1,1-Dichloroethene	3.75	3.96	3.83	106	102	70.0-130			3.34	25
cis-1,2-Dichloroethene	3.75	3.80	3.70	101	98.7	70.0-130			2.67	25
trans-1,2-Dichloroethene	3.75	3.96	3.88	106	103	70.0-130			2.04	25
1,2-Dichloropropane	3.75	3.73	3.64	99.5	97.1	70.0-130			2.44	25
cis-1,3-Dichloropropene	3.75	3.66	3.58	97.6	95.5	70.0-130			2.21	25
trans-1,3-Dichloropropene	3.75	3.66	3.57	97.6	95.2	70.0-130			2.49	25
1,4-Dioxane	3.75	3.85	3.75	103	100	70.0-140			2.63	25
Ethanol	3.75	4.00	3.82	107	102	55.0-148			4.60	25
Ethylbenzene	3.75	3.71	3.60	98.9	96.0	70.0-130			3.01	25
4-Ethyltoluene	3.75	3.81	3.74	102	99.7	70.0-130			1.85	25
Trichlorofluoromethane	3.75	3.88	3.78	103	101	70.0-130			2.61	25
Dichlorodifluoromethane	3.75	3.84	3.74	102	99.7	64.0-139			2.64	25
1,1,2-Trichlorotrifluoroethane	3.75	4.01	3.89	107	104	70.0-130			3.04	25
1,2-Dichlorotetrafluoroethane	3.75	4.04	3.92	108	105	70.0-130			3.02	25
Hexachloro-1,3-butadiene	3.75	3.91	3.87	104	103	70.0-151			1.03	25
Isopropylbenzene	3.75	3.74	3.67	99.7	97.9	70.0-130			1.89	25
Methylene Chloride	3.75	3.90	3.78	104	101	70.0-130			3.13	25
Methyl Butyl Ketone	3.75	3.82	3.68	102	98.1	70.0-149			3.73	25
Methyl Ethyl Ketone	3.75	3.86	3.71	103	98.9	70.0-130			3.96	25
4-Methyl-2-pentanone (MIBK)	3.75	3.97	3.82	106	102	70.0-139			3.85	25
Methyl Methacrylate	3.75	3.65	3.54	97.3	94.4	70.0-130			3.06	25
MTBE	3.75	3.87	3.73	103	99.5	70.0-130			3.68	25
Naphthalene	3.75	3.97	3.85	106	103	70.0-159			3.07	25
2-Propanol	3.75	3.95	3.82	105	102	70.0-139			3.35	25
Propene	3.75	3.94	3.85	105	103	64.0-144			2.31	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3826021-1 08/13/22 05:59 • (LCSD) R3826021-2 08/13/22 06:32

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	3.75	3.66	100	97.6	70.0-130			2.43	25
1,1,2,2-Tetrachloroethane	3.75	3.81	3.74	102	99.7	70.0-130			1.85	25
Tetrachloroethylene	3.75	3.70	3.59	98.7	95.7	70.0-130			3.02	25
Tetrahydrofuran	3.75	3.83	3.67	102	97.9	70.0-137			4.27	25
Toluene	3.75	3.71	3.67	98.9	97.9	70.0-130			1.08	25
1,2,4-Trichlorobenzene	3.75	3.89	3.72	104	99.2	70.0-160			4.47	25
1,1,1-Trichloroethane	3.75	3.83	3.73	102	99.5	70.0-130			2.65	25
1,1,2-Trichloroethane	3.75	3.70	3.59	98.7	95.7	70.0-130			3.02	25
Trichloroethylene	3.75	3.75	3.62	100	96.5	70.0-130			3.53	25
1,2,4-Trimethylbenzene	3.75	3.98	3.89	106	104	70.0-130			2.29	25
1,3,5-Trimethylbenzene	3.75	3.85	3.75	103	100	70.0-130			2.63	25
2,2,4-Trimethylpentane	3.75	3.92	3.77	105	101	70.0-130			3.90	25
Vinyl chloride	3.75	3.95	3.83	105	102	70.0-130			3.08	25
Vinyl Bromide	3.75	3.90	3.76	104	100	70.0-130			3.66	25
Vinyl acetate	3.75	3.76	3.61	100	96.3	70.0-130			4.07	25
m&p-Xylene	7.50	7.76	7.68	103	102	70.0-130			1.04	25
o-Xylene	3.75	3.90	3.75	104	100	70.0-130			3.92	25
TPH (GC/MS) Low Fraction	203	247	242	122	119	70.0-130			2.04	25
(S) 1,4-Bromofluorobenzene				98.4	98.4	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1524848-01](#)

Method Blank (MB)

(MB) R3826650-3 08/15/22 09:54

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
(S) 1,4-Bromofluorobenzene	93.7			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3826650-1 08/15/22 08:28 • (LCSD) R3826650-2 08/15/22 09:12

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	4.10	4.05	109	108	70.0-130			1.23	25
Heptane	3.75	4.31	4.41	115	118	70.0-130			2.29	25
(S) 1,4-Bromofluorobenzene				100	100	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1524848-01

Method Blank (MB)

(MB) R3827115-3 08/16/22 09:46

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	102			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3827115-1 08/16/22 08:47 • (LCSD) R3827115-2 08/16/22 09:18

	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	4.43	4.47	118	119	70.0-130			0.899	25
(S) 1,4-Bromofluorobenzene				106	106	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.

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

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⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Company Name/Address:
Ensolum, LLC**601 Marienfeld #400
Midland, TX 79701**

Billing Information:

**Accounts Payable
2351 W Northwest Hwy. Ste.
1203
Dallas, TX 75220**Pres
ChkReport to:
Beaux JenningsEmail To: **bjennings@ensolum.com**

Project Description:

Levey Well

City/State

Collected: Hobbs NM

Please Circle:

PT MT CT ET

Phone: **210-219-8858**

Client Project #

03B1417001

Lab Project #

ENSOLUMMTX-SUMMA

Collected by (print):

Shane Diller

Site/Facility ID #

03B1417001

P.O. #

03B1417001

Collected by (signature):

Rush? (Lab MUST Be Notified)☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☒ Three Day

Date Results Needed

No.
of
Cnts

Immediately

Packed on Ice: N ☐ X ☐ Y ☐

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Levey Well

G

Air

8-10-22, 1353

1

X

TO-15 Summa

Analysis / Container / Preservative

Chain of Custody Page ____ of ____

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG #

M114Acctnum: **ENSOLUMMTX**Template: **T180734**Prelogin: **P827709**PM: **134 - Mark W. Beasley**

PB:

Shipped Via:

Remarks

Sample # (lab only)

-01

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☐ N IF Applicable

COC Signed/Accurate: ☒ Y ☐ N VOA Zero Headspace: ☐ Y ☒ N

Bottles arrive intact: ☒ Y ☐ N Pres. Correct/Check: ☐ Y ☒ N

Correct bottles used: ☒ Y ☐ N

Sufficient volume sent: ☒ Y ☐ N

RAD Screen <0.5 mR/hr: ☒ Y ☐ N

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

5719 6177 8102

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: ☐ NP ☒ Y ☐ N

COC Signed/Accurate: ☒ Y ☐ N

Bottles arrive intact: ☒ Y ☐ N

Correct bottles used: ☒ Y ☐ N

Sufficient volume sent: ☒ Y ☐ N

IF Applicable

VOA Zero Headspace: ☐ Y ☒ N

Preservation Correct/Checked: ☐ Y ☒ N

RAD Screen <0.5 mR/hr: ☒ Y ☐ N

Relinquished by: (Signature)

Date:

8/11/22

Time:

10:30

Received by: (Signature)

C

Trip Blank Received: Yes / No

HCL / MeOH
TBR

Relinquished by: (Signature)

Date:

8/11/22

Time:

1400

Received by: (Signature)

FedEx

Temp: °C Bottles Received:

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

C

Date: 8/12/22 Time: 0900

Hold:

Condition:
NCF / OK



ANALYTICAL REPORT

August 22, 2022

Ensolum, LLC

Sample Delivery Group: L1526312
Samples Received: 08/17/2022
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

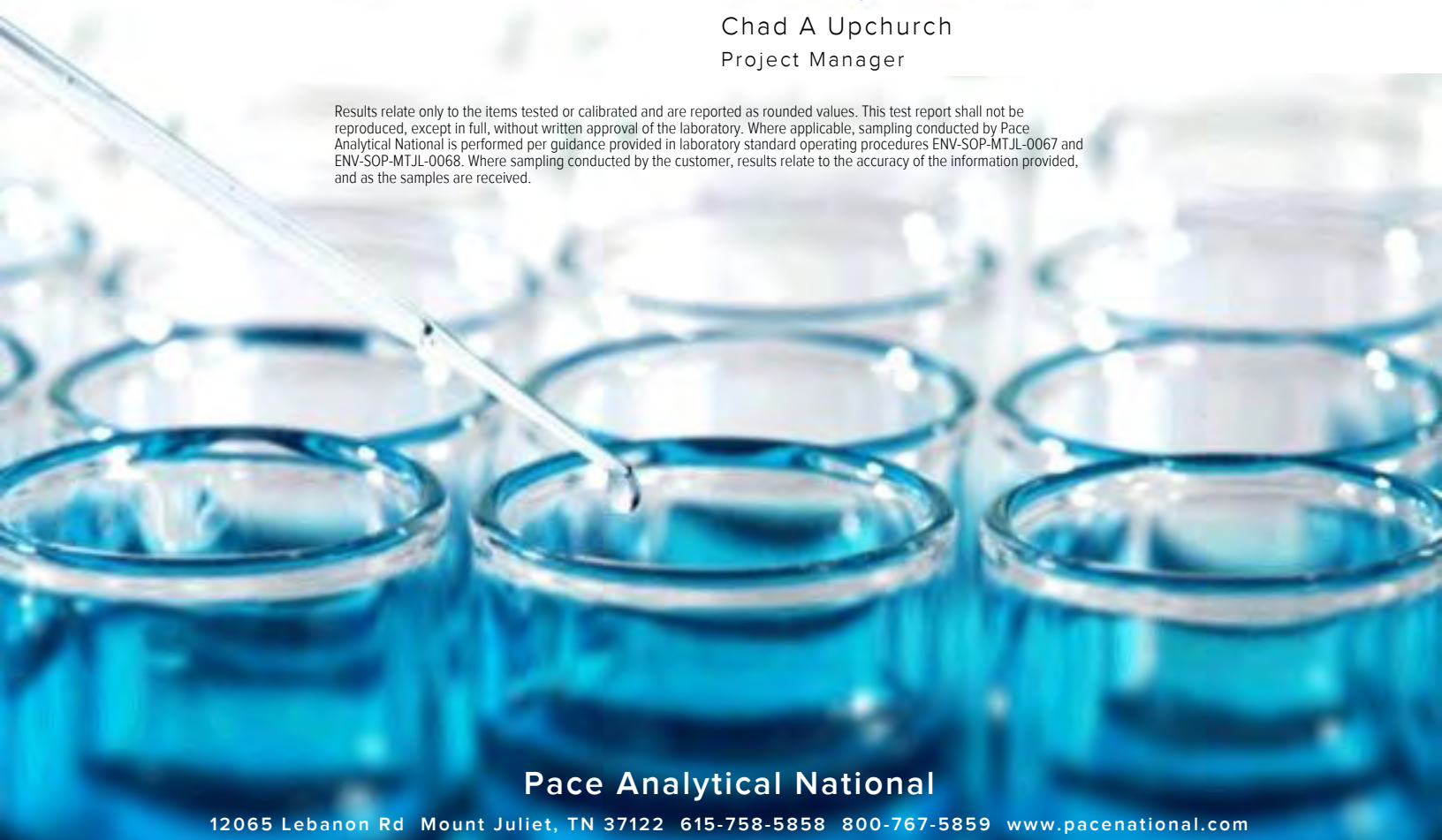


Entire Report Reviewed By:

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 L1526312-01	9	6 Sr
LEVEY WELL L1526312-02	11	
LEVEY WELL L1526312-03	13	7 Qc
LEVEY WELL L1526312-04	15	8 Gl
Qc: Quality Control Summary	17	
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Al: Accreditations & Locations	29	10 Sc
Sc: Sample Chain of Custody	30	

LEVEY WELL L1526312-01 Air

Collected by
Shane Diller

Collected date/time
08/15/22 09:53

Received date/time
08/17/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1913438	200	08/19/22 21:42	08/19/22 21:42	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1914549	4000	08/22/22 11:25	08/22/22 11:25	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1914645	40000	08/22/22 14:04	08/22/22 14:04	CEP	Mt. Juliet, TN

¹Cp

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³Ss

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LEVEY WELL L1526312-02 Air

Collected by
Shane Diller

Collected date/time
08/15/22 12:58

Received date/time
08/17/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1912822	1	08/18/22 22:16	08/18/22 22:16	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1913435	20	08/19/22 15:52	08/19/22 15:52	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1914549	200	08/22/22 12:04	08/22/22 12:04	CEP	Mt. Juliet, TN

LEVEY WELL L1526312-03 Air

Collected by
Shane Diller

Collected date/time
08/15/22 14:05

Received date/time
08/17/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1912822	5	08/18/22 22:56	08/18/22 22:56	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1913435	50	08/19/22 17:15	08/19/22 17:15	FKG	Mt. Juliet, TN

LEVEY WELL L1526312-04 Air

Collected by
Shane Diller

Collected date/time
08/15/22 15:13

Received date/time
08/17/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1912822	100	08/19/22 00:20	08/19/22 00:20	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1913435	1000	08/19/22 18:38	08/19/22 18:38	FKG	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

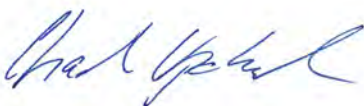
¹⁰ Sc

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: 08/22/2022 17:54				
Project Name: Levey Well			Laboratory Job Number: L1526312-01, 02, 03 and 04				
Reviewer Name: Chad A Upchurch			Prep Batch Number(s): WG1912822, WG1913435, WG1913438, WG1914549 and WG1914645				
# 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: 08/22/2022 17:54					
Project Name: Levey Well		Laboratory Job Number: L1526312-01, 02, 03 and 04					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1912822, WG1913435, WG1913438, WG1914549 and WG1914645					
# 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: 08/22/2022 17:54	
Project Name: Levey Well		Laboratory Job Number: L1526312-01, 02, 03 and 04	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1912822, WG1913435, WG1913438, WG1914549 and WG1914645	
ER #¹	Description		
1	TO-15 WG1912822 L1526312-02 and 04: 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: 08/15/22 09:53

L1526312

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	ND	ND		200	WG1913438
Allyl chloride	107-05-1	76.53	40.0	125	ND	ND		200	WG1913438
Benzene	71-43-2	78.10	40.0	128	ND	ND		200	WG1913438
Benzyl Chloride	100-44-7	127	40.0	208	ND	ND		200	WG1913438
Bromodichloromethane	75-27-4	164	40.0	268	ND	ND		200	WG1913438
Bromoform	75-25-2	253	120	1240	ND	ND		200	WG1913438
Bromomethane	74-83-9	94.90	40.0	155	ND	ND		200	WG1913438
1,3-Butadiene	106-99-0	54.10	400	885	ND	ND		200	WG1913438
Carbon disulfide	75-15-0	76.10	40.0	124	90.0	280		200	WG1913438
Carbon tetrachloride	56-23-5	154	40.0	252	ND	ND		200	WG1913438
Chlorobenzene	108-90-7	113	40.0	185	ND	ND		200	WG1913438
Chloroethane	75-00-3	64.50	40.0	106	ND	ND		200	WG1913438
Chloroform	67-66-3	119	40.0	195	ND	ND		200	WG1913438
Chloromethane	74-87-3	50.50	40.0	82.6	ND	ND		200	WG1913438
2-Chlorotoluene	95-49-8	126	40.0	206	ND	ND		200	WG1913438
Cyclohexane	110-82-7	84.20	800	2760	158000	544000		4000	WG1914549
Dibromochloromethane	124-48-1	208	40.0	340	ND	ND		200	WG1913438
1,2-Dibromoethane	106-93-4	188	40.0	308	ND	ND		200	WG1913438
1,2-Dichlorobenzene	95-50-1	147	40.0	240	ND	ND		200	WG1913438
1,3-Dichlorobenzene	541-73-1	147	40.0	240	ND	ND		200	WG1913438
1,4-Dichlorobenzene	106-46-7	147	40.0	240	ND	ND		200	WG1913438
1,2-Dichloroethane	107-06-2	99	40.0	162	ND	ND		200	WG1913438
1,1-Dichloroethane	75-34-3	98	40.0	160	ND	ND		200	WG1913438
1,1-Dichloroethene	75-35-4	96.90	40.0	159	ND	ND		200	WG1913438
cis-1,2-Dichloroethene	156-59-2	96.90	40.0	159	ND	ND		200	WG1913438
trans-1,2-Dichloroethene	156-60-5	96.90	40.0	159	ND	ND		200	WG1913438
1,2-Dichloropropane	78-87-5	113	40.0	185	ND	ND		200	WG1913438
cis-1,3-Dichloropropene	10061-01-5	111	40.0	182	ND	ND		200	WG1913438
trans-1,3-Dichloropropene	10061-02-6	111	40.0	182	ND	ND		200	WG1913438
1,4-Dioxane	123-91-1	88.10	40.0	144	ND	ND		200	WG1913438
Ethanol	64-17-5	46.10	250	471	1670	3150		200	WG1913438
Ethylbenzene	100-41-4	106	40.0	173	ND	ND		200	WG1913438
4-Ethyltoluene	622-96-8	120	40.0	196	ND	ND		200	WG1913438
Trichlorofluoromethane	75-69-4	137.40	40.0	225	ND	ND		200	WG1913438
Dichlorodifluoromethane	75-71-8	120.92	40.0	198	ND	ND		200	WG1913438
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	40.0	307	ND	ND		200	WG1913438
1,2-Dichlorotetrafluoroethane	76-14-2	171	40.0	280	ND	ND		200	WG1913438
Heptane	142-82-5	100	800	3270	226000	924000		4000	WG1914549
Hexachloro-1,3-butadiene	87-68-3	261	126	1350	ND	ND		200	WG1913438
n-Hexane	110-54-3	86.20	25200	88800	1950000	6870000		40000	WG1914645
Isopropylbenzene	98-82-8	120.20	40.0	197	ND	ND		200	WG1913438
Methylene Chloride	75-09-2	84.90	40.0	139	ND	ND		200	WG1913438
Methyl Butyl Ketone	591-78-6	100	250	1020	ND	ND		200	WG1913438
2-Butanone (MEK)	78-93-3	72.10	250	737	ND	ND		200	WG1913438
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	250	1020	ND	ND		200	WG1913438
Methyl methacrylate	80-62-6	100.12	40.0	164	349	1430		200	WG1913438
MTBE	1634-04-4	88.10	40.0	144	ND	ND		200	WG1913438
Naphthalene	91-20-3	128	126	660	ND	ND		200	WG1913438
2-Propanol	67-63-0	60.10	250	615	ND	ND		200	WG1913438
Propene	115-07-1	42.10	250	430	ND	ND		200	WG1913438
Styrene	100-42-5	104	40.0	170	ND	ND		200	WG1913438
1,1,2,2-Tetrachloroethane	79-34-5	168	40.0	275	ND	ND		200	WG1913438
Tetrachloroethylene	127-18-4	166	40.0	272	ND	ND		200	WG1913438
Tetrahydrofuran	109-99-9	72.10	40.0	118	ND	ND		200	WG1913438
Toluene	108-88-3	92.10	100	377	ND	ND		200	WG1913438
1,2,4-Trichlorobenzene	120-82-1	181	126	933	ND	ND		200	WG1913438



Collected date/time: 08/15/22 09:53

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	WG1913438
1,1,2-Trichloroethane	79-00-5	133	40.0	218	ND	ND		200	WG1913438
Trichloroethylene	79-01-6	131	40.0	214	ND	ND		200	WG1913438
1,2,4-Trimethylbenzene	95-63-6	120	40.0	196	ND	ND		200	WG1913438
1,3,5-Trimethylbenzene	108-67-8	120	40.0	196	57.2	281		200	WG1913438
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	ND	ND		200	WG1913438
Vinyl chloride	75-01-4	62.50	40.0	102	ND	ND		200	WG1913438
Vinyl Bromide	593-60-2	106.95	40.0	175	ND	ND		200	WG1913438
Vinyl acetate	108-05-4	86.10	40.0	141	ND	ND		200	WG1913438
m&p-Xylene	1330-20-7	106	80.0	347	ND	ND		200	WG1913438
o-Xylene	95-47-6	106	40.0	173	ND	ND		200	WG1913438
TPH (GC/MS) Low Fraction	8006-61-9	101	800000	3300000	5340000	22100000		4000	WG1914549
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG1913438
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.7				WG1914549
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		86.7				WG1914645

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Collected date/time: 08/15/22 12:58

L1526312

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	175	416	E	1	WG1912822
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1912822
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1912822
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1912822
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1912822
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1912822
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1912822
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1912822
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.656	2.04		1	WG1912822
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1912822
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1912822
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1912822
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1912822
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1912822
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1912822
Cyclohexane	110-82-7	84.20	4.00	13.8	508	1750		20	WG1913435
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1912822
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1912822
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1912822
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1912822
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1912822
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1912822
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1912822
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1912822
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1912822
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1912822
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1912822
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1912822
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1912822
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1912822
Ethanol	64-17-5	46.10	1.25	2.36	16.5	31.1		1	WG1912822
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1912822
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1912822
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1912822
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.308	1.52		1	WG1912822
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1912822
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1912822
Heptane	142-82-5	100	4.00	16.4	774	3170		20	WG1913435
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1912822
n-Hexane	110-54-3	86.20	126	444	2990	10500		200	WG1914549
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1912822
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1912822
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1912822
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	61.4	181		1	WG1912822
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1912822
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1912822
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1912822
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1912822
2-Propanol	67-63-0	60.10	1.25	3.07	17.2	42.3		1	WG1912822
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1912822
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1912822
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1912822
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1912822
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1912822
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1912822
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1912822

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 08/15/22 12:58

L1526312

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	WG1912822
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1912822
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1912822
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.01	9.87		1	WG1912822
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	4.29	21.1		1	WG1912822
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1912822
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1912822
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1912822
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1912822
m&p-Xylene	1330-20-7	106	0.400	1.73	2.21	9.58		1	WG1912822
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1912822
TPH (GC/MS) Low Fraction	8006-61-9	101	4000	16500	21300	88000		20	WG1913435
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1912822
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		91.0				WG1913435
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.1				WG1914549

¹Cp²Tc³Ss⁴Cn⁵Tr⁶Sr⁷Qc⁸Gl⁹Al¹⁰Sc

Collected date/time: 08/15/22 14:05

L1526312

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	6.25	14.9	257	611		5	WG1912822
Allyl chloride	107-05-1	76.53	1.00	3.13	ND	ND		5	WG1912822
Benzene	71-43-2	78.10	1.00	3.19	ND	ND		5	WG1912822
Benzyl Chloride	100-44-7	127	1.00	5.19	ND	ND		5	WG1912822
Bromodichloromethane	75-27-4	164	1.00	6.71	ND	ND		5	WG1912822
Bromoform	75-25-2	253	3.00	31.0	ND	ND		5	WG1912822
Bromomethane	74-83-9	94.90	1.00	3.88	ND	ND		5	WG1912822
1,3-Butadiene	106-99-0	54.10	10.0	22.1	ND	ND		5	WG1912822
Carbon disulfide	75-15-0	76.10	1.00	3.11	ND	ND		5	WG1912822
Carbon tetrachloride	56-23-5	154	1.00	6.30	ND	ND		5	WG1912822
Chlorobenzene	108-90-7	113	1.00	4.62	ND	ND		5	WG1912822
Chloroethane	75-00-3	64.50	1.00	2.64	ND	ND		5	WG1912822
Chloroform	67-66-3	119	1.00	4.87	ND	ND		5	WG1912822
Chloromethane	74-87-3	50.50	1.00	2.07	ND	ND		5	WG1912822
2-Chlorotoluene	95-49-8	126	1.00	5.15	ND	ND		5	WG1912822
Cyclohexane	110-82-7	84.20	1.00	3.44	474	1630		5	WG1912822
Dibromochloromethane	124-48-1	208	1.00	8.51	ND	ND		5	WG1912822
1,2-Dibromoethane	106-93-4	188	1.00	7.69	ND	ND		5	WG1912822
1,2-Dichlorobenzene	95-50-1	147	1.00	6.01	ND	ND		5	WG1912822
1,3-Dichlorobenzene	541-73-1	147	1.00	6.01	ND	ND		5	WG1912822
1,4-Dichlorobenzene	106-46-7	147	1.00	6.01	ND	ND		5	WG1912822
1,2-Dichloroethane	107-06-2	99	1.00	4.05	ND	ND		5	WG1912822
1,1-Dichloroethane	75-34-3	98	1.00	4.01	ND	ND		5	WG1912822
1,1-Dichloroethene	75-35-4	96.90	1.00	3.96	ND	ND		5	WG1912822
cis-1,2-Dichloroethene	156-59-2	96.90	1.00	3.96	ND	ND		5	WG1912822
trans-1,2-Dichloroethene	156-60-5	96.90	1.00	3.96	ND	ND		5	WG1912822
1,2-Dichloropropane	78-87-5	113	1.00	4.62	ND	ND		5	WG1912822
cis-1,3-Dichloropropene	10061-01-5	111	1.00	4.54	ND	ND		5	WG1912822
trans-1,3-Dichloropropene	10061-02-6	111	1.00	4.54	ND	ND		5	WG1912822
1,4-Dioxane	123-91-1	88.10	1.00	3.60	ND	ND		5	WG1912822
Ethanol	64-17-5	46.10	6.25	11.8	24.5	46.2		5	WG1912822
Ethylbenzene	100-41-4	106	1.00	4.34	ND	ND		5	WG1912822
4-Ethyltoluene	622-96-8	120	1.00	4.91	ND	ND		5	WG1912822
Trichlorofluoromethane	75-69-4	137.40	1.00	5.62	ND	ND		5	WG1912822
Dichlorodifluoromethane	75-71-8	120.92	1.00	4.95	ND	ND		5	WG1912822
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	1.00	7.66	ND	ND		5	WG1912822
1,2-Dichlorotetrafluoroethane	76-14-2	171	1.00	6.99	ND	ND		5	WG1912822
Heptane	142-82-5	100	10.0	40.9	341	1390		50	WG1913435
Hexachloro-1,3-butadiene	87-68-3	261	3.15	33.6	ND	ND		5	WG1912822
n-Hexane	110-54-3	86.20	31.5	111	1570	5540		50	WG1913435
Isopropylbenzene	98-82-8	120.20	1.00	4.92	ND	ND		5	WG1912822
Methylene Chloride	75-09-2	84.90	1.00	3.47	ND	ND		5	WG1912822
Methyl Butyl Ketone	591-78-6	100	6.25	25.6	ND	ND		5	WG1912822
2-Butanone (MEK)	78-93-3	72.10	6.25	18.4	76.5	226		5	WG1912822
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	6.25	25.6	ND	ND		5	WG1912822
Methyl methacrylate	80-62-6	100.12	1.00	4.09	ND	ND		5	WG1912822
MTBE	1634-04-4	88.10	1.00	3.60	ND	ND		5	WG1912822
Naphthalene	91-20-3	128	3.15	16.5	ND	ND		5	WG1912822
2-Propanol	67-63-0	60.10	6.25	15.4	36.1	88.7		5	WG1912822
Propene	115-07-1	42.10	6.25	10.8	ND	ND		5	WG1912822
Styrene	100-42-5	104	1.00	4.25	ND	ND		5	WG1912822
1,1,2,2-Tetrachloroethane	79-34-5	168	1.00	6.87	ND	ND		5	WG1912822
Tetrachloroethylene	127-18-4	166	1.00	6.79	ND	ND		5	WG1912822
Tetrahydrofuran	109-99-9	72.10	1.00	2.95	ND	ND		5	WG1912822
Toluene	108-88-3	92.10	2.50	9.42	ND	ND		5	WG1912822
1,2,4-Trichlorobenzene	120-82-1	181	3.15	23.3	ND	ND		5	WG1912822



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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	1.00	5.44	ND	ND		5	WG1912822
1,1,2-Trichloroethane	79-00-5	133	1.00	5.44	ND	ND		5	WG1912822
Trichloroethylene	79-01-6	131	1.00	5.36	ND	ND		5	WG1912822
1,2,4-Trimethylbenzene	95-63-6	120	1.00	4.91	2.28	11.2		5	WG1912822
1,3,5-Trimethylbenzene	108-67-8	120	1.00	4.91	4.25	20.9		5	WG1912822
2,2,4-Trimethylpentane	540-84-1	114.22	1.00	4.67	ND	ND		5	WG1912822
Vinyl chloride	75-01-4	62.50	1.00	2.56	ND	ND		5	WG1912822
Vinyl Bromide	593-60-2	106.95	1.00	4.37	ND	ND		5	WG1912822
Vinyl acetate	108-05-4	86.10	1.00	3.52	ND	ND		5	WG1912822
m&p-Xylene	1330-20-7	106	2.00	8.67	3.27	14.2		5	WG1912822
o-Xylene	95-47-6	106	1.00	4.34	ND	ND		5	WG1912822
TPH (GC/MS) Low Fraction	8006-61-9	101	1000	4130	19200	79300		5	WG1912822
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.4				WG1912822
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		91.1				WG1913435

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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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
Acetone	67-64-1	58.10	125	297	1600	3800		100	WG1912822
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1912822
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1912822
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1912822
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1912822
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1912822
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1912822
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1912822
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1912822
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1912822
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1912822
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1912822
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1912822
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1912822
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1912822
Cyclohexane	110-82-7	84.20	20.0	68.9	2690	9260		100	WG1912822
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1912822
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1912822
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1912822
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1912822
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1912822
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1912822
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1912822
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1912822
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1912822
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1912822
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1912822
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1912822
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1912822
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1912822
Ethanol	64-17-5	46.10	125	236	1420	2680		100	WG1912822
Ethylbenzene	100-41-4	106	20.0	86.7	ND	ND		100	WG1912822
4-Ethyltoluene	622-96-8	120	20.0	98.2	ND	ND		100	WG1912822
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1912822
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1912822
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1912822
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1912822
Heptane	142-82-5	100	20.0	81.8	4660	19100		100	WG1912822
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1912822
n-Hexane	110-54-3	86.20	630	2220	21500	75800		1000	WG1913435
Isopropylbenzene	98-82-8	120.20	20.0	98.3	ND	ND		100	WG1912822
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1912822
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1912822
2-Butanone (MEK)	78-93-3	72.10	125	369	595	1750		100	WG1912822
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1912822
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1912822
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1912822
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1912822
2-Propanol	67-63-0	60.10	125	307	17300	42500	E	100	WG1912822
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1912822
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1912822
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1912822
Tetrachloroethylene	127-18-4	166	20.0	136	ND	ND		100	WG1912822
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1912822
Toluene	108-88-3	92.10	50.0	188	ND	ND		100	WG1912822
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1912822



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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	20.0	109	ND	ND		100	WG1912822
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1912822
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG1912822
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	ND	ND		100	WG1912822
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	ND	ND		100	WG1912822
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1912822
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1912822
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1912822
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1912822
m&p-Xylene	1330-20-7	106	40.0	173	ND	ND		100	WG1912822
o-Xylene	95-47-6	106	20.0	86.7	ND	ND		100	WG1912822
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	122000	504000		100	WG1912822
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		90.1				WG1912822
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.3				WG1913435

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Method Blank (MB)

(MB) R3827993-3 08/18/22 10:00

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1526312-02,03,04

Method Blank (MB)

(MB) R3827993-3 08/18/22 10:00

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	0.195	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	94.8			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3827993-1 08/18/22 08:36 • (LCSD) R3827993-2 08/18/22 09:18

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	3.84	98.9	102	70.0-130			3.44	25
Allyl Chloride	3.75	3.78	3.78	101	101	70.0-130			0.000	25
Benzene	3.75	3.89	3.83	104	102	70.0-130			1.55	25
Benzyl Chloride	3.75	3.83	3.88	102	103	70.0-152			1.30	25
Bromodichloromethane	3.75	3.85	3.86	103	103	70.0-130			0.259	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3827993-1 08/18/22 08:36 • (LCSD) R3827993-2 08/18/22 09:18

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	3.82	3.88	102	103	70.0-130			1.56	25
Bromomethane	3.75	3.95	3.99	105	106	70.0-130			1.01	25
1,3-Butadiene	3.75	3.88	3.85	103	103	70.0-130			0.776	25
Carbon disulfide	3.75	4.50	4.50	120	120	70.0-130			0.000	25
Carbon tetrachloride	3.75	3.90	3.94	104	105	70.0-130			1.02	25
Chlorobenzene	3.75	4.01	3.95	107	105	70.0-130			1.51	25
Chloroethane	3.75	4.00	4.07	107	109	70.0-130			1.73	25
Chloroform	3.75	3.89	3.95	104	105	70.0-130			1.53	25
Chloromethane	3.75	3.91	4.00	104	107	70.0-130			2.28	25
2-Chlorotoluene	3.75	3.69	3.70	98.4	98.7	70.0-130			0.271	25
Cyclohexane	3.75	3.97	4.00	106	107	70.0-130			0.753	25
Dibromochloromethane	3.75	3.92	3.86	105	103	70.0-130			1.54	25
1,2-Dibromoethane	3.75	4.08	4.00	109	107	70.0-130			1.98	25
1,2-Dichlorobenzene	3.75	3.77	3.75	101	100	70.0-130			0.532	25
1,3-Dichlorobenzene	3.75	3.77	3.74	101	99.7	70.0-130			0.799	25
1,4-Dichlorobenzene	3.75	3.66	3.69	97.6	98.4	70.0-130			0.816	25
1,2-Dichloroethane	3.75	3.77	3.84	101	102	70.0-130			1.84	25
1,1-Dichloroethane	3.75	3.97	4.04	106	108	70.0-130			1.75	25
1,1-Dichloroethene	3.75	4.09	4.03	109	107	70.0-130			1.48	25
cis-1,2-Dichloroethene	3.75	3.96	4.01	106	107	70.0-130			1.25	25
trans-1,2-Dichloroethene	3.75	3.99	3.94	106	105	70.0-130			1.26	25
1,2-Dichloropropane	3.75	3.82	3.90	102	104	70.0-130			2.07	25
cis-1,3-Dichloropropene	3.75	3.94	3.99	105	106	70.0-130			1.26	25
trans-1,3-Dichloropropene	3.75	3.94	3.92	105	105	70.0-130			0.509	25
1,4-Dioxane	3.75	4.13	4.00	110	107	70.0-140			3.20	25
Ethanol	3.75	3.68	3.75	98.1	100	55.0-148			1.88	25
Ethylbenzene	3.75	3.94	4.00	105	107	70.0-130			1.51	25
4-Ethyltoluene	3.75	3.78	3.76	101	100	70.0-130			0.531	25
Trichlorofluoromethane	3.75	4.03	4.06	107	108	70.0-130			0.742	25
Dichlorodifluoromethane	3.75	2.92	2.93	77.9	78.1	64.0-139			0.342	25
1,1,2-Trichlorotrifluoroethane	3.75	3.97	3.99	106	106	70.0-130			0.503	25
1,2-Dichlorotetrafluoroethane	3.75	4.01	4.08	107	109	70.0-130			1.73	25
Heptane	3.75	3.59	3.63	95.7	96.8	70.0-130			1.11	25
Hexachloro-1,3-butadiene	3.75	3.93	4.00	105	107	70.0-151			1.77	25
Isopropylbenzene	3.75	3.91	3.92	104	105	70.0-130			0.255	25
Methylene Chloride	3.75	3.85	3.90	103	104	70.0-130			1.29	25
Methyl Butyl Ketone	3.75	3.86	3.79	103	101	70.0-149			1.83	25
Methyl Ethyl Ketone	3.75	4.06	4.07	108	109	70.0-130			0.246	25
4-Methyl-2-pentanone (MIBK)	3.75	3.91	3.92	104	105	70.0-139			0.255	25
Methyl Methacrylate	3.75	3.93	3.93	105	105	70.0-130			0.000	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3827993-1 08/18/22 08:36 • (LCSD) R3827993-2 08/18/22 09:18

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	4.02	3.99	107	106	70.0-130			0.749	25
Naphthalene	3.75	4.03	3.99	107	106	70.0-159			0.998	25
2-Propanol	3.75	3.84	3.84	102	102	70.0-139			0.000	25
Propene	3.75	3.77	3.81	101	102	64.0-144			1.06	25
Styrene	3.75	3.95	4.00	105	107	70.0-130			1.26	25
1,1,2,2-Tetrachloroethane	3.75	3.75	3.78	100	101	70.0-130			0.797	25
Tetrachloroethylene	3.75	4.05	3.98	108	106	70.0-130			1.74	25
Tetrahydrofuran	3.75	3.87	3.96	103	106	70.0-137			2.30	25
Toluene	3.75	3.90	3.91	104	104	70.0-130			0.256	25
1,2,4-Trichlorobenzene	3.75	4.08	4.08	109	109	70.0-160			0.000	25
1,1,1-Trichloroethane	3.75	3.93	3.98	105	106	70.0-130			1.26	25
1,1,2-Trichloroethane	3.75	3.98	3.96	106	106	70.0-130			0.504	25
Trichloroethylene	3.75	3.83	3.82	102	102	70.0-130			0.261	25
1,2,4-Trimethylbenzene	3.75	3.87	3.86	103	103	70.0-130			0.259	25
1,3,5-Trimethylbenzene	3.75	3.85	3.85	103	103	70.0-130			0.000	25
2,2,4-Trimethylpentane	3.75	3.97	4.02	106	107	70.0-130			1.25	25
Vinyl chloride	3.75	4.03	4.02	107	107	70.0-130			0.248	25
Vinyl Bromide	3.75	4.14	4.22	110	113	70.0-130			1.91	25
Vinyl acetate	3.75	3.87	3.97	103	106	70.0-130			2.55	25
m&p-Xylene	7.50	7.90	7.98	105	106	70.0-130			1.01	25
o-Xylene	3.75	3.88	3.92	103	105	70.0-130			1.03	25
TPH (GC/MS) Low Fraction	203	215	215	106	106	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				96.2	96.4	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3828592-3 08/19/22 10:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	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	90.2			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828592-1 08/19/22 08:49 • (LCSD) R3828592-2 08/19/22 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	3.66	3.57	97.6	95.2	70.0-130			2.49	25
Heptane	3.75	3.11	3.07	82.9	81.9	70.0-130			1.29	25
n-Hexane	3.75	3.40	3.38	90.7	90.1	70.0-130			0.590	25
TPH (GC/MS) Low Fraction	203	199	188	98.0	92.6	70.0-130			5.68	25
(S) 1,4-Bromofluorobenzene				90.5	90.1	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3828593-3 08/19/22 09:31

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) R3828593-3 08/19/22 09:31

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	0.186	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	97.2			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828593-1 08/19/22 08:30 • (LCSD) R3828593-2 08/19/22 09:01

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	3.60	3.65	96.0	97.3	70.0-130			1.38	25
Allyl Chloride	3.75	3.69	3.73	98.4	99.5	70.0-130			1.08	25
Benzene	3.75	3.77	3.76	101	100	70.0-130			0.266	25
Benzyl Chloride	3.75	4.37	4.36	117	116	70.0-152			0.229	25
Bromodichloromethane	3.75	3.77	3.78	101	101	70.0-130			0.265	25
Bromoform	3.75	3.90	3.90	104	104	70.0-130			0.000	25
Bromomethane	3.75	3.65	3.74	97.3	99.7	70.0-130			2.44	25
1,3-Butadiene	3.75	3.58	3.65	95.5	97.3	70.0-130			1.94	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828593-1 08/19/22 08:30 • (LCSD) R3828593-2 08/19/22 09:01

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	3.76	3.82	100	102	70.0-130			1.58	25
Carbon tetrachloride	3.75	3.74	3.79	99.7	101	70.0-130			1.33	25
Chlorobenzene	3.75	3.83	3.83	102	102	70.0-130			0.000	25
Chloroethane	3.75	3.72	3.72	99.2	99.2	70.0-130			0.000	25
Chloroform	3.75	3.75	3.76	100	100	70.0-130			0.266	25
Chloromethane	3.75	3.66	3.76	97.6	100	70.0-130			2.70	25
2-Chlorotoluene	3.75	3.84	3.88	102	103	70.0-130			1.04	25
Dibromochloromethane	3.75	3.78	3.76	101	100	70.0-130			0.531	25
1,2-Dibromoethane	3.75	3.84	3.87	102	103	70.0-130			0.778	25
1,2-Dichlorobenzene	3.75	4.05	4.04	108	108	70.0-130			0.247	25
1,3-Dichlorobenzene	3.75	4.17	4.19	111	112	70.0-130			0.478	25
1,4-Dichlorobenzene	3.75	4.25	4.23	113	113	70.0-130			0.472	25
1,2-Dichloroethane	3.75	3.75	3.82	100	102	70.0-130			1.85	25
1,1-Dichloroethane	3.75	3.70	3.73	98.7	99.5	70.0-130			0.808	25
1,1-Dichloroethene	3.75	3.69	3.78	98.4	101	70.0-130			2.41	25
cis-1,2-Dichloroethene	3.75	3.72	3.74	99.2	99.7	70.0-130			0.536	25
trans-1,2-Dichloroethene	3.75	3.72	3.74	99.2	99.7	70.0-130			0.536	25
1,2-Dichloropropane	3.75	3.77	3.79	101	101	70.0-130			0.529	25
cis-1,3-Dichloropropene	3.75	3.74	3.71	99.7	98.9	70.0-130			0.805	25
trans-1,3-Dichloropropene	3.75	3.84	3.81	102	102	70.0-130			0.784	25
1,4-Dioxane	3.75	3.75	3.77	100	101	70.0-140			0.532	25
Ethanol	3.75	3.65	3.69	97.3	98.4	55.0-148			1.09	25
Ethylbenzene	3.75	3.78	3.80	101	101	70.0-130			0.528	25
4-Ethyltoluene	3.75	3.98	3.99	106	106	70.0-130			0.251	25
Trichlorofluoromethane	3.75	3.74	3.75	99.7	100	70.0-130			0.267	25
Dichlorodifluoromethane	3.75	3.72	3.77	99.2	101	64.0-139			1.34	25
1,1,2-Trichlorotrifluoroethane	3.75	3.81	3.80	102	101	70.0-130			0.263	25
1,2-Dichlorotetrafluoroethane	3.75	3.75	3.78	100	101	70.0-130			0.797	25
Hexachloro-1,3-butadiene	3.75	3.92	3.89	105	104	70.0-151			0.768	25
Isopropylbenzene	3.75	3.89	3.85	104	103	70.0-130			1.03	25
Methylene Chloride	3.75	3.63	3.71	96.8	98.9	70.0-130			2.18	25
Methyl Butyl Ketone	3.75	3.81	3.82	102	102	70.0-149			0.262	25
Methyl Ethyl Ketone	3.75	3.71	3.66	98.9	97.6	70.0-130			1.36	25
4-Methyl-2-pentanone (MIBK)	3.75	3.90	3.91	104	104	70.0-139			0.256	25
Methyl Methacrylate	3.75	3.78	3.80	101	101	70.0-130			0.528	25
MTBE	3.75	3.72	3.71	99.2	98.9	70.0-130			0.269	25
Naphthalene	3.75	4.20	4.22	112	113	70.0-159			0.475	25
2-Propanol	3.75	3.64	3.66	97.1	97.6	70.0-139			0.548	25
Propene	3.75	3.77	3.84	101	102	64.0-144			1.84	25
Styrene	3.75	3.91	3.93	104	105	70.0-130			0.510	25

1

Cp

2

Tc

3

Ss

4

Cn

5

Tr

6

Sr

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Qc

8

Gl

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Al

10

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828593-1 08/19/22 08:30 • (LCSD) R3828593-2 08/19/22 09:01

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	3.95	104	105	70.0-130			1.27	25
Tetrachloroethylene	3.75	3.84	3.81	102	102	70.0-130			0.784	25
Tetrahydrofuran	3.75	3.66	3.63	97.6	96.8	70.0-137			0.823	25
Toluene	3.75	3.77	3.80	101	101	70.0-130			0.793	25
1,2,4-Trichlorobenzene	3.75	4.24	4.29	113	114	70.0-160			1.17	25
1,1,1-Trichloroethane	3.75	3.69	3.73	98.4	99.5	70.0-130			1.08	25
1,1,2-Trichloroethane	3.75	3.78	3.82	101	102	70.0-130			1.05	25
Trichloroethylene	3.75	3.82	3.80	102	101	70.0-130			0.525	25
1,2,4-Trimethylbenzene	3.75	4.03	4.06	107	108	70.0-130			0.742	25
1,3,5-Trimethylbenzene	3.75	3.93	3.98	105	106	70.0-130			1.26	25
2,2,4-Trimethylpentane	3.75	3.71	3.79	98.9	101	70.0-130			2.13	25
Vinyl chloride	3.75	3.70	3.72	98.7	99.2	70.0-130			0.539	25
Vinyl Bromide	3.75	3.75	3.79	100	101	70.0-130			1.06	25
Vinyl acetate	3.75	3.57	3.52	95.2	93.9	70.0-130			1.41	25
m&p-Xylene	7.50	7.96	7.98	106	106	70.0-130			0.251	25
o-Xylene	3.75	3.88	3.89	103	104	70.0-130			0.257	25
(S) 1,4-Bromofluorobenzene				101	101	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3828879-3 08/22/22 09:51

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	89.9			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828879-1 08/22/22 08:29 • (LCSD) R3828879-2 08/22/22 09:11

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	4.47	4.65	119	124	70.0-130			3.95	25
Heptane	3.75	4.46	4.57	119	122	70.0-130			2.44	25
n-Hexane	3.75	4.54	4.65	121	124	70.0-130			2.39	25
TPH (GC/MS) Low Fraction	203	238	241	117	119	70.0-130			1.25	25
(S) 1,4-Bromofluorobenzene				99.1	97.5	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1526312-01](#)

Method Blank (MB)

(MB) R3828957-3 08/22/22 09:51

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	89.9			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828957-1 08/22/22 08:29 • (LCSD) R3828957-2 08/22/22 09:11

	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	4.54	4.65	121	124	70.0-130			2.39	25
(S) 1,4-Bromofluorobenzene				99.1	97.5	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
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.



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

Company Name/Address:

Ensolium, LLC
601 Marienfeld #400
Midland, TX 79701

Billing Information:

Accounts Payable
2351 W Northwest Hwy. Ste.
1203
Dallas, TX 75220Pres
Chk

Report to:

Beaux Jennings

Email To: bjennings@ensolum.com

Project Description:

Levey Well

City/State

Collected: Hobbs NM

Please Circle:

PT MT CT ET

Phone: 210-219-8858

Client Project #

03B1417001

Lab Project #

ENSOLUMMTX-SUMMA

Collected by (print):

Shane Diller

Site/Facility ID #

03B1417001

P.O. #

03B1417001

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day Five Day

Next Day 5 Day (Rad Only)

Two Day 10 Day (Rad Only)

X Three Day

Quote #

Date Results Needed

Immediately

Packed on Ice N X Y

No.
of
Cntrs

TO-15 Summa

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs
Levey Well	G	Air	-	8-15-22	953	1 X
Levey Well	G	Air	-	8-15-22	1258	1 X
Levey Well	G	Air	-	8-15-22	1405	1 X
Levey Well	G	Air	-	8-15-22	1513	1 X
N ² 8-16-22						

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

Sample Receipt Checklist

COC Seal Present/Intact: Y N IF Applicable
COC Signed/Accurate: Y N VOA Zero Headspace: Y N
Bottles arrive intact: Y N Pres. Correct/Check: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
RAD Screen <0.5 mR/hr: Y N

pH Temp

Flow Other

Sample Receipt Checklist

COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by: (Signature)

Date:

8/16/22

Time:

830

Received by: (Signature)

Trip Blank Received: Yes/No

HCL/MeOH
TBR

Relinquished by: (Signature)

Date:

8/16/22

Time:

11:08

Received by: (Signature)

Temp: °C Bottles Received:

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: Time:

Hold:

Condition:
NCF / 0

Chain of Custody Page 1 of 1

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # 1526312

J065

Acctnum: ENSOLUMMTX

Template: T180734

Prelogin: P827709

PM: 134 - Mark W. Beasley

PB:

Shipped Via:

Remarks Sample # (lab only)



ANALYTICAL REPORT

August 23, 2022

Ensolum, LLC

Sample Delivery Group: L1527701
Samples Received: 08/20/2022
Project Number: 03B1417001
Description: Levey Well
Site: 03B147001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

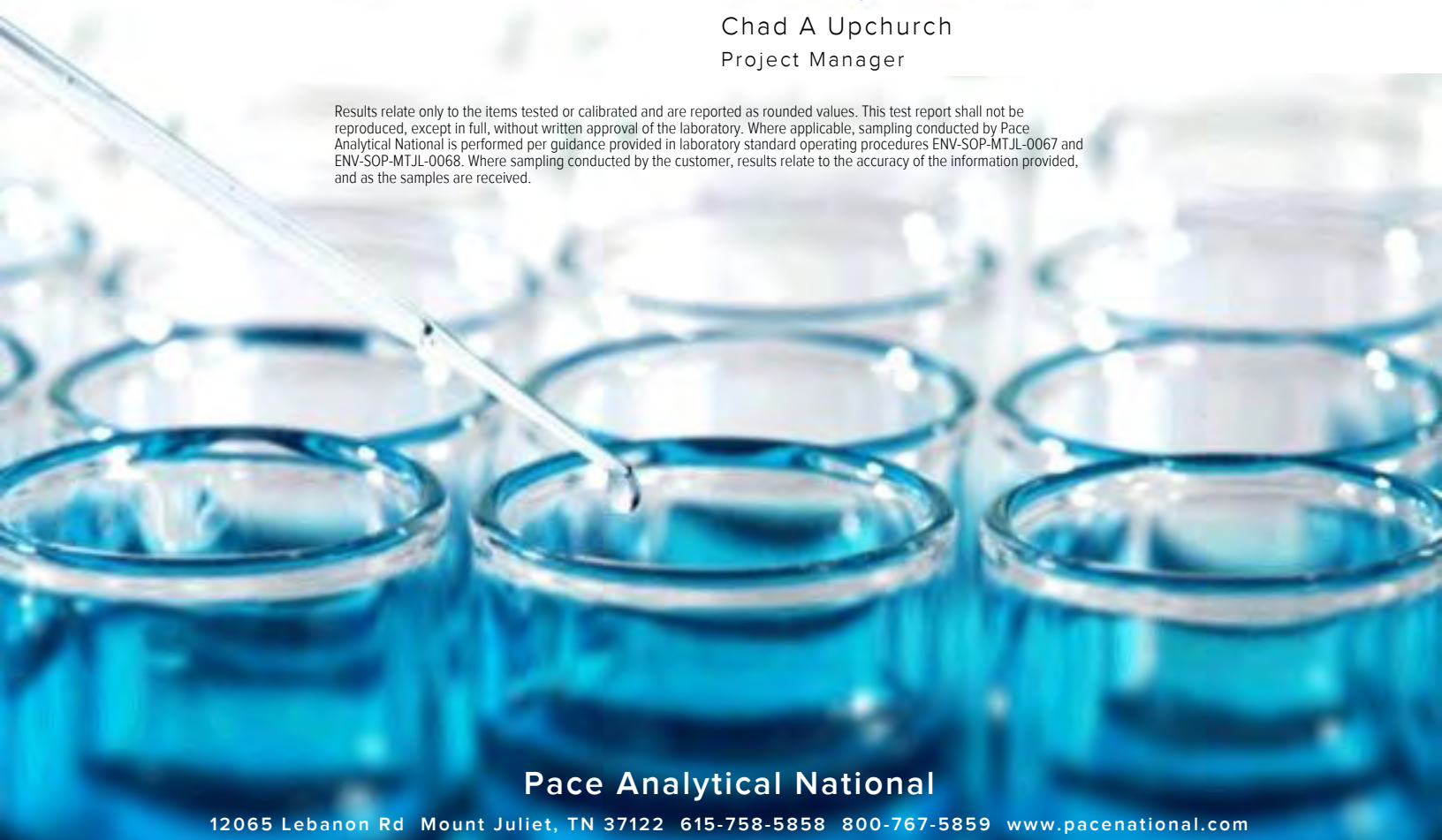


Entire Report Reviewed By:

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 L1527701-01	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 L1527701-01 Air

Collected by
Shane Diller

Collected date/time
08/18/22 12:31

Received date/time
08/20/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1914138	80	08/21/22 21:11	08/21/22 21:11	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1914662	4000	08/22/22 15:29	08/22/22 15:29	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

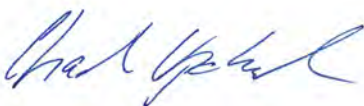
- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

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: 08/23/2022 11:50					
Project Name: Levey Well		Laboratory Job Number: L1527701-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1914138 and WG1914662					
# 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: 08/23/2022 11:50					
Project Name: Levey Well		Laboratory Job Number: L1527701-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1914138 and WG1914662					
# 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: 08/23/2022 11:50	
Project Name: Levey Well		Laboratory Job Number: L1527701-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1914138 and WG1914662	
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: 08/18/22 12:31

L1527701

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	100	238	ND	ND		80	WG1914138
Allyl chloride	107-05-1	76.53	16.0	50.1	ND	ND		80	WG1914138
Benzene	71-43-2	78.10	16.0	51.1	ND	ND		80	WG1914138
Benzyl Chloride	100-44-7	127	16.0	83.1	ND	ND		80	WG1914138
Bromodichloromethane	75-27-4	164	16.0	107	ND	ND		80	WG1914138
Bromoform	75-25-2	253	48.0	497	ND	ND		80	WG1914138
Bromomethane	74-83-9	94.90	16.0	62.1	ND	ND		80	WG1914138
1,3-Butadiene	106-99-0	54.10	160	354	ND	ND		80	WG1914138
Carbon disulfide	75-15-0	76.10	16.0	49.8	79.1	246		80	WG1914138
Carbon tetrachloride	56-23-5	154	16.0	101	ND	ND		80	WG1914138
Chlorobenzene	108-90-7	113	16.0	73.9	ND	ND		80	WG1914138
Chloroethane	75-00-3	64.50	16.0	42.2	ND	ND		80	WG1914138
Chloroform	67-66-3	119	16.0	77.9	ND	ND		80	WG1914138
Chloromethane	74-87-3	50.50	16.0	33.0	ND	ND		80	WG1914138
2-Chlorotoluene	95-49-8	126	16.0	82.5	ND	ND		80	WG1914138
Cyclohexane	110-82-7	84.20	800	2760	42400	146000		4000	WG1914662
Dibromochloromethane	124-48-1	208	16.0	136	ND	ND		80	WG1914138
1,2-Dibromoethane	106-93-4	188	16.0	123	ND	ND		80	WG1914138
1,2-Dichlorobenzene	95-50-1	147	16.0	96.2	ND	ND		80	WG1914138
1,3-Dichlorobenzene	541-73-1	147	16.0	96.2	ND	ND		80	WG1914138
1,4-Dichlorobenzene	106-46-7	147	16.0	96.2	ND	ND		80	WG1914138
1,2-Dichloroethane	107-06-2	99	16.0	64.8	ND	ND		80	WG1914138
1,1-Dichloroethane	75-34-3	98	16.0	64.1	ND	ND		80	WG1914138
1,1-Dichloroethene	75-35-4	96.90	16.0	63.4	ND	ND		80	WG1914138
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	ND	ND		80	WG1914138
trans-1,2-Dichloroethene	156-60-5	96.90	16.0	63.4	ND	ND		80	WG1914138
1,2-Dichloropropane	78-87-5	113	16.0	73.9	ND	ND		80	WG1914138
cis-1,3-Dichloropropene	10061-01-5	111	16.0	72.6	ND	ND		80	WG1914138
trans-1,3-Dichloropropene	10061-02-6	111	16.0	72.6	ND	ND		80	WG1914138
1,4-Dioxane	123-91-1	88.10	16.0	57.7	ND	ND		80	WG1914138
Ethanol	64-17-5	46.10	100	189	408	769		80	WG1914138
Ethylbenzene	100-41-4	106	16.0	69.4	ND	ND		80	WG1914138
4-Ethyltoluene	622-96-8	120	16.0	78.5	ND	ND		80	WG1914138
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	ND	ND		80	WG1914138
Dichlorodifluoromethane	75-71-8	120.92	16.0	79.1	ND	ND		80	WG1914138
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	16.0	123	ND	ND		80	WG1914138
1,2-Dichlorotetrafluoroethane	76-14-2	171	16.0	112	ND	ND		80	WG1914138
Heptane	142-82-5	100	800	3270	72200	295000		4000	WG1914662
Hexachloro-1,3-butadiene	87-68-3	261	50.4	538	ND	ND		80	WG1914138
n-Hexane	110-54-3	86.20	2520	8880	388000	1370000		4000	WG1914662
Isopropylbenzene	98-82-8	120.20	16.0	78.7	ND	ND		80	WG1914138
Methylene Chloride	75-09-2	84.90	16.0	55.6	18.4	63.9		80	WG1914138
Methyl Butyl Ketone	591-78-6	100	100	409	ND	ND		80	WG1914138
2-Butanone (MEK)	78-93-3	72.10	100	295	2120	6250		80	WG1914138
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	100	409	ND	ND		80	WG1914138
Methyl methacrylate	80-62-6	100.12	16.0	65.5	ND	ND		80	WG1914138
MTBE	1634-04-4	88.10	16.0	57.7	ND	ND		80	WG1914138
Naphthalene	91-20-3	128	50.4	264	ND	ND		80	WG1914138
2-Propanol	67-63-0	60.10	100	246	6300	15500		80	WG1914138
Propene	115-07-1	42.10	100	172	ND	ND		80	WG1914138
Styrene	100-42-5	104	16.0	68.1	ND	ND		80	WG1914138
1,1,2,2-Tetrachloroethane	79-34-5	168	16.0	110	ND	ND		80	WG1914138
Tetrachloroethylene	127-18-4	166	16.0	109	ND	ND		80	WG1914138
Tetrahydrofuran	109-99-9	72.10	16.0	47.2	ND	ND		80	WG1914138
Toluene	108-88-3	92.10	40.0	151	ND	ND		80	WG1914138
1,2,4-Trichlorobenzene	120-82-1	181	50.4	373	ND	ND		80	WG1914138



Collected date/time: 08/18/22 12:31

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	16.0	87.0	ND	ND		80	WG1914138
1,1,2-Trichloroethane	79-00-5	133	16.0	87.0	ND	ND		80	WG1914138
Trichloroethylene	79-01-6	131	16.0	85.7	ND	ND		80	WG1914138
1,2,4-Trimethylbenzene	95-63-6	120	16.0	78.5	ND	ND		80	WG1914138
1,3,5-Trimethylbenzene	108-67-8	120	16.0	78.5	30.2	148		80	WG1914138
2,2,4-Trimethylpentane	540-84-1	114.22	16.0	74.7	ND	ND		80	WG1914138
Vinyl chloride	75-01-4	62.50	16.0	40.9	ND	ND		80	WG1914138
Vinyl Bromide	593-60-2	106.95	16.0	70.0	ND	ND		80	WG1914138
Vinyl acetate	108-05-4	86.10	16.0	56.3	ND	ND		80	WG1914138
m&p-Xylene	1330-20-7	106	32.0	139	ND	ND		80	WG1914138
o-Xylene	95-47-6	106	16.0	69.4	22.0	95.4		80	WG1914138
TPH (GC/MS) Low Fraction	8006-61-9	101	800000	3300000	1820000	7520000		4000	WG1914662
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		108				WG1914138
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.0				WG1914662

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3828755-3 08/21/22 09:13

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) R3828755-3 08/21/22 09:13

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	0.187	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	97.8			60.0-140

1

Cp

2

Tc

3

Ss

4

Cn

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Tr

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Sr

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Qc

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Gl

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Al

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Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828755-1 08/21/22 08:13 • (LCSD) R3828755-2 08/21/22 08:44

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	3.69	98.9	98.4	70.0-130			0.541	25
Allyl Chloride	3.75	3.74	3.77	99.7	101	70.0-130			0.799	25
Benzene	3.75	3.83	3.81	102	102	70.0-130			0.524	25
Benzyl Chloride	3.75	4.39	4.33	117	115	70.0-152			1.38	25
Bromodichloromethane	3.75	3.87	3.84	103	102	70.0-130			0.778	25
Bromoform	3.75	3.92	3.91	105	104	70.0-130			0.255	25
Bromomethane	3.75	3.83	3.86	102	103	70.0-130			0.780	25
1,3-Butadiene	3.75	3.69	3.70	98.4	98.7	70.0-130			0.271	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828755-1 08/21/22 08:13 • (LCSD) R3828755-2 08/21/22 08:44

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	3.88	3.86	103	103	70.0-130			0.517	25
Carbon tetrachloride	3.75	3.87	3.83	103	102	70.0-130			1.04	25
Chlorobenzene	3.75	3.90	3.88	104	103	70.0-130			0.514	25
Chloroethane	3.75	3.77	3.81	101	102	70.0-130			1.06	25
Chloroform	3.75	3.85	3.84	103	102	70.0-130			0.260	25
Chloromethane	3.75	3.86	3.81	103	102	70.0-130			1.30	25
2-Chlorotoluene	3.75	3.92	3.91	105	104	70.0-130			0.255	25
Dibromochloromethane	3.75	3.91	3.82	104	102	70.0-130			2.33	25
1,2-Dibromoethane	3.75	3.97	3.89	106	104	70.0-130			2.04	25
1,2-Dichlorobenzene	3.75	4.13	4.08	110	109	70.0-130			1.22	25
1,3-Dichlorobenzene	3.75	4.28	4.27	114	114	70.0-130			0.234	25
1,4-Dichlorobenzene	3.75	4.35	4.33	116	115	70.0-130			0.461	25
1,2-Dichloroethane	3.75	3.90	3.89	104	104	70.0-130			0.257	25
1,1-Dichloroethane	3.75	3.87	3.86	103	103	70.0-130			0.259	25
1,1-Dichloroethene	3.75	3.86	3.91	103	104	70.0-130			1.29	25
cis-1,2-Dichloroethene	3.75	3.81	3.83	102	102	70.0-130			0.524	25
trans-1,2-Dichloroethene	3.75	3.84	3.87	102	103	70.0-130			0.778	25
1,2-Dichloropropane	3.75	3.84	3.79	102	101	70.0-130			1.31	25
cis-1,3-Dichloropropene	3.75	3.80	3.72	101	99.2	70.0-130			2.13	25
trans-1,3-Dichloropropene	3.75	3.90	3.88	104	103	70.0-130			0.514	25
1,4-Dioxane	3.75	3.82	3.80	102	101	70.0-140			0.525	25
Ethanol	3.75	3.72	3.71	99.2	98.9	55.0-148			0.269	25
Ethylbenzene	3.75	3.89	3.87	104	103	70.0-130			0.515	25
4-Ethyltoluene	3.75	4.06	4.06	108	108	70.0-130			0.000	25
Trichlorofluoromethane	3.75	3.88	3.84	103	102	70.0-130			1.04	25
Dichlorodifluoromethane	3.75	3.86	3.81	103	102	64.0-139			1.30	25
1,1,2-Trichlorotrifluoroethane	3.75	3.89	3.87	104	103	70.0-130			0.515	25
1,2-Dichlorotetrafluoroethane	3.75	3.88	3.85	103	103	70.0-130			0.776	25
Hexachloro-1,3-butadiene	3.75	3.93	3.88	105	103	70.0-151			1.28	25
Isopropylbenzene	3.75	3.94	3.90	105	104	70.0-130			1.02	25
Methylene Chloride	3.75	3.85	3.74	103	99.7	70.0-130			2.90	25
Methyl Butyl Ketone	3.75	3.90	3.91	104	104	70.0-149			0.256	25
Methyl Ethyl Ketone	3.75	3.79	3.80	101	101	70.0-130			0.264	25
4-Methyl-2-pentanone (MIBK)	3.75	4.00	3.98	107	106	70.0-139			0.501	25
Methyl Methacrylate	3.75	3.83	3.81	102	102	70.0-130			0.524	25
MTBE	3.75	3.82	3.82	102	102	70.0-130			0.000	25
Naphthalene	3.75	4.29	4.26	114	114	70.0-159			0.702	25
2-Propanol	3.75	3.74	3.70	99.7	98.7	70.0-139			1.08	25
Propene	3.75	3.94	3.87	105	103	64.0-144			1.79	25
Styrene	3.75	3.97	3.98	106	106	70.0-130			0.252	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3828755-1 08/21/22 08:13 • (LCSD) R3828755-2 08/21/22 08:44

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	3.97	3.96	106	106	70.0-130			0.252	25
Tetrachloroethylene	3.75	3.92	3.87	105	103	70.0-130			1.28	25
Tetrahydrofuran	3.75	3.73	3.72	99.5	99.2	70.0-137			0.268	25
Toluene	3.75	3.83	3.82	102	102	70.0-130			0.261	25
1,2,4-Trichlorobenzene	3.75	4.37	4.35	117	116	70.0-160			0.459	25
1,1,1-Trichloroethane	3.75	3.84	3.81	102	102	70.0-130			0.784	25
1,1,2-Trichloroethane	3.75	3.90	3.81	104	102	70.0-130			2.33	25
Trichloroethylene	3.75	3.90	3.85	104	103	70.0-130			1.29	25
1,2,4-Trimethylbenzene	3.75	4.11	4.15	110	111	70.0-130			0.969	25
1,3,5-Trimethylbenzene	3.75	4.04	4.02	108	107	70.0-130			0.496	25
2,2,4-Trimethylpentane	3.75	3.82	3.85	102	103	70.0-130			0.782	25
Vinyl chloride	3.75	3.83	3.81	102	102	70.0-130			0.524	25
Vinyl Bromide	3.75	3.88	3.86	103	103	70.0-130			0.517	25
Vinyl acetate	3.75	3.65	3.65	97.3	97.3	70.0-130			0.000	25
m&p-Xylene	7.50	8.18	8.17	109	109	70.0-130			0.122	25
o-Xylene	3.75	3.99	3.96	106	106	70.0-130			0.755	25
(S) 1,4-Bromofluorobenzene				102	102	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3829193-3 08/22/22 13:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	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	92.9			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3829193-1 08/22/22 12:16 • (LCSD) R3829193-2 08/22/22 13:00

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	4.17	4.18	111	111	70.0-130			0.240	25
Heptane	3.75	4.29	4.28	114	114	70.0-130			0.233	25
n-Hexane	3.75	4.24	4.23	113	113	70.0-130			0.236	25
TPH (GC/MS) Low Fraction	203	233	236	115	116	70.0-130			1.28	25
(S) 1,4-Bromofluorobenzene				97.9	95.8	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.

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.



Released to Imaging: 3/20/2024 4:55:42 PM



ANALYTICAL REPORT

August 31, 2022

Ensolum, LLC

Sample Delivery Group: L1529720
Samples Received: 08/26/2022
Project Number: 03B1417001
Description:
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

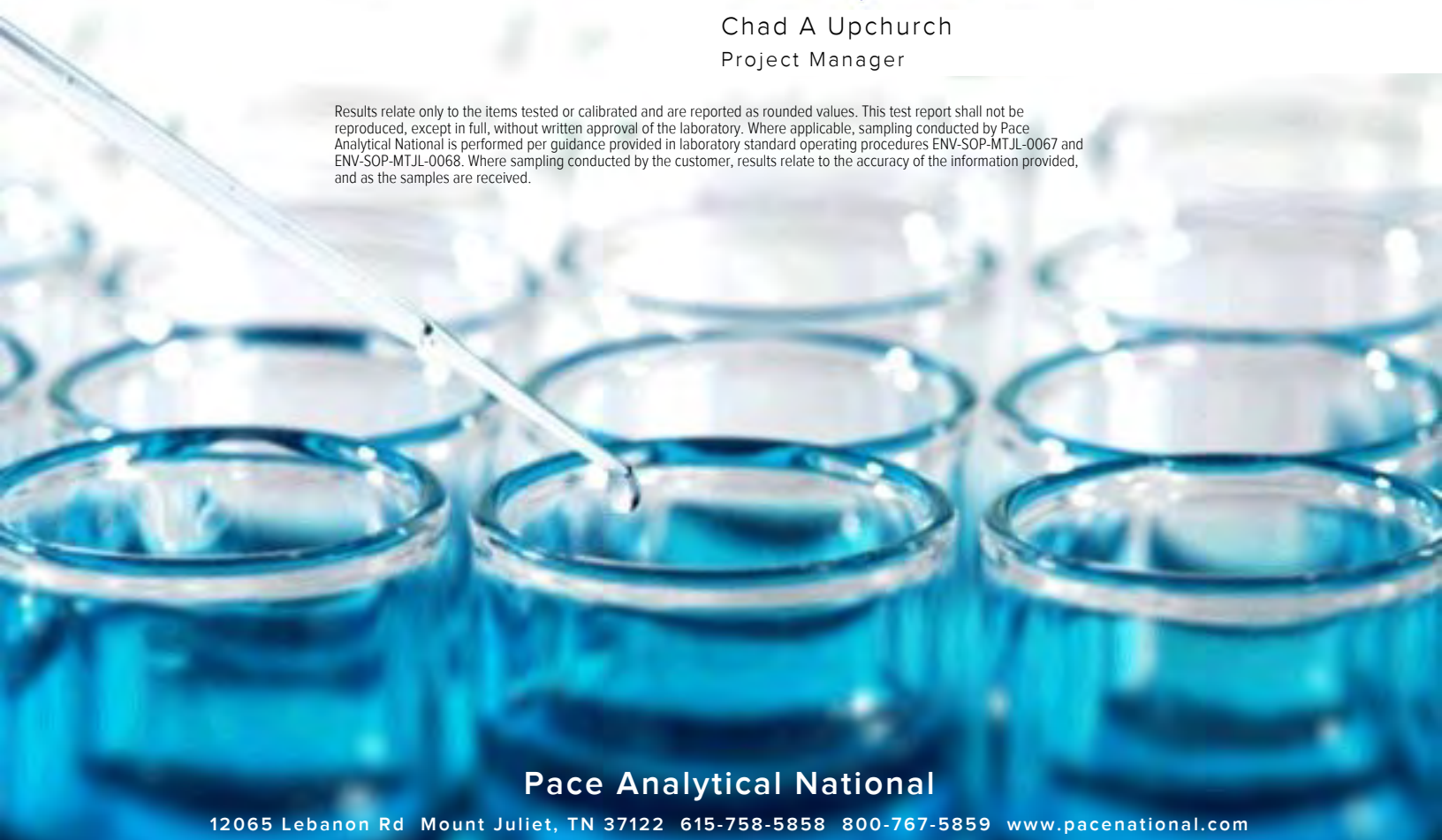


Entire Report Reviewed By:

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 L1529720-01	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 L1529720-01 Air

Collected by
Shane Diller

Collected date/time
08/24/22 11:47

Received date/time
08/26/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1917471	100	08/27/22 21:08	08/27/22 21:08	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1918031	5000	08/30/22 01:10	08/30/22 01:10	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1919277	40000	08/31/22 12:34	08/31/22 12:34	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.



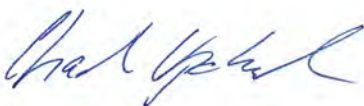
Chad A Upchurch
Project Manager

- 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: 08/31/2022 15:31					
Project Name:		Laboratory Job Number: L1529720-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1917471, WG1918031 and WG1919277					
#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: 08/31/2022 15:31				
Project Name:			Laboratory Job Number: L1529720-01				
Reviewer Name: Chad A Upchurch			Prep Batch Number(s): WG1917471, WG1918031 and WG1919277				
# 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: 08/31/2022 15:31	
Project Name:		Laboratory Job Number: L1529720-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1917471, WG1918031 and WG1919277	
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: 08/24/22 11:47

L1529720

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	ND	ND		100	WG1917471
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1917471
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1917471
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1917471
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1917471
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1917471
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1917471
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1917471
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1917471
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1917471
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1917471
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1917471
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1917471
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1917471
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1917471
Cyclohexane	110-82-7	84.20	1000	3440	170000	585000		5000	WG1918031
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1917471
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1917471
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1917471
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1917471
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1917471
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1917471
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1917471
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1917471
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1917471
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1917471
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1917471
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1917471
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1917471
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1917471
Ethanol	64-17-5	46.10	125	236	ND	ND		100	WG1917471
Ethylbenzene	100-41-4	106	20.0	86.7	ND	ND		100	WG1917471
4-Ethyltoluene	622-96-8	120	20.0	98.2	ND	ND		100	WG1917471
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1917471
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1917471
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1917471
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1917471
Heptane	142-82-5	100	1000	4090	256000	1050000		5000	WG1918031
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1917471
n-Hexane	110-54-3	86.20	25200	88800	2540000	8950000		40000	WG1919277
Isopropylbenzene	98-82-8	120.20	20.0	98.3	ND	ND		100	WG1917471
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1917471
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1917471
2-Butanone (MEK)	78-93-3	72.10	125	369	4710	13900		100	WG1917471
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1917471
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1917471
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1917471
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1917471
2-Propanol	67-63-0	60.10	125	307	5500	13500		100	WG1917471
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1917471
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1917471
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1917471
Tetrachloroethylene	127-18-4	166	20.0	136	ND	ND		100	WG1917471
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1917471
Toluene	108-88-3	92.10	50.0	188	ND	ND		100	WG1917471
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1917471

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 08/24/22 11:47

L1529720

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	WG1917471
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1917471
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG1917471
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	ND	ND		100	WG1917471
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	ND	ND		100	WG1917471
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1917471
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1917471
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1917471
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1917471
m&p-Xylene	1330-20-7	106	40.0	173	ND	ND		100	WG1917471
o-Xylene	95-47-6	106	20.0	86.7	ND	ND		100	WG1917471
TPH (GC/MS) Low Fraction	8006-61-9	101	1000000	4130000	9870000	40800000		5000	WG1918031
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		106				WG1917471
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG1918031
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.3				WG1919277

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3831250-3 08/27/22 07:20

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

L1529720-01

Method Blank (MB)

(MB) R3831250-3 08/27/22 07:20

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	0.125	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	99.2			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3831250-1 08/27/22 06:01 • (LCSD) R3831250-2 08/27/22 06:41

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	4.05	4.01	108	107	70.0-130			0.993	25
Allyl Chloride	3.75	4.28	4.31	114	115	70.0-130			0.698	25
Benzene	3.75	3.46	3.39	92.3	90.4	70.0-130			2.04	25
Benzyl Chloride	3.75	3.41	3.45	90.9	92.0	70.0-152			1.17	25
Bromodichloromethane	3.75	3.19	3.20	85.1	85.3	70.0-130			0.313	25
Bromoform	3.75	3.25	3.24	86.7	86.4	70.0-130			0.308	25
Bromomethane	3.75	2.74	2.73	73.1	72.8	70.0-130			0.366	25
1,3-Butadiene	3.75	3.69	3.58	98.4	95.5	70.0-130			3.03	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3831250-1 08/27/22 06:01 • (LCSD) R3831250-2 08/27/22 06:41

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 %
Carbon disulfide	3.75	3.60	3.54	96.0	94.4	70.0-130			1.68	25
Carbon tetrachloride	3.75	3.53	3.45	94.1	92.0	70.0-130			2.29	25
Chlorobenzene	3.75	3.33	3.30	88.8	88.0	70.0-130			0.905	25
Chloroethane	3.75	2.81	2.81	74.9	74.9	70.0-130			0.000	25
Chloroform	3.75	3.45	3.44	92.0	91.7	70.0-130			0.290	25
Chloromethane	3.75	4.65	4.49	124	120	70.0-130			3.50	25
2-Chlorotoluene	3.75	3.43	3.44	91.5	91.7	70.0-130			0.291	25
Dibromochloromethane	3.75	3.18	3.18	84.8	84.8	70.0-130			0.000	25
1,2-Dibromoethane	3.75	3.38	3.36	90.1	89.6	70.0-130			0.593	25
1,2-Dichlorobenzene	3.75	3.42	3.43	91.2	91.5	70.0-130			0.292	25
1,3-Dichlorobenzene	3.75	3.42	3.42	91.2	91.2	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	3.35	3.40	89.3	90.7	70.0-130			1.48	25
1,2-Dichloroethane	3.75	3.27	3.26	87.2	86.9	70.0-130			0.306	25
1,1-Dichloroethane	3.75	3.70	3.64	98.7	97.1	70.0-130			1.63	25
1,1-Dichloroethene	3.75	3.58	3.55	95.5	94.7	70.0-130			0.842	25
cis-1,2-Dichloroethene	3.75	3.77	3.71	101	98.9	70.0-130			1.60	25
trans-1,2-Dichloroethene	3.75	3.73	3.65	99.5	97.3	70.0-130			2.17	25
1,2-Dichloropropane	3.75	3.63	3.64	96.8	97.1	70.0-130			0.275	25
cis-1,3-Dichloropropene	3.75	3.39	3.36	90.4	89.6	70.0-130			0.889	25
trans-1,3-Dichloropropene	3.75	3.36	3.33	89.6	88.8	70.0-130			0.897	25
1,4-Dioxane	3.75	3.63	3.61	96.8	96.3	70.0-140			0.552	25
Ethanol	3.75	4.15	4.01	111	107	55.0-148			3.43	25
Ethylbenzene	3.75	3.55	3.55	94.7	94.7	70.0-130			0.000	25
4-Ethyltoluene	3.75	3.59	3.62	95.7	96.5	70.0-130			0.832	25
Trichlorofluoromethane	3.75	2.91	2.88	77.6	76.8	70.0-130			1.04	25
Dichlorodifluoromethane	3.75	3.51	3.42	93.6	91.2	64.0-139			2.60	25
1,1,2-Trichlorotrifluoroethane	3.75	3.37	3.40	89.9	90.7	70.0-130			0.886	25
1,2-Dichlorotetrafluoroethane	3.75	3.57	3.53	95.2	94.1	70.0-130			1.13	25
Hexachloro-1,3-butadiene	3.75	3.02	3.04	80.5	81.1	70.0-151			0.660	25
Isopropylbenzene	3.75	3.63	3.65	96.8	97.3	70.0-130			0.549	25
Methylene Chloride	3.75	4.22	4.10	113	109	70.0-130			2.88	25
Methyl Butyl Ketone	3.75	4.30	4.27	115	114	70.0-149			0.700	25
Methyl Ethyl Ketone	3.75	3.66	3.64	97.6	97.1	70.0-130			0.548	25
4-Methyl-2-pentanone (MIBK)	3.75	4.27	4.24	114	113	70.0-139			0.705	25
Methyl Methacrylate	3.75	3.54	3.60	94.4	96.0	70.0-130			1.68	25
MTBE	3.75	3.53	3.43	94.1	91.5	70.0-130			2.87	25
Naphthalene	3.75	3.18	3.23	84.8	86.1	70.0-159			1.56	25
2-Propanol	3.75	4.26	4.16	114	111	70.0-139			2.38	25
Propene	3.75	4.85	4.75	129	127	64.0-144			2.08	25
Styrene	3.75	3.73	3.71	99.5	98.9	70.0-130			0.538	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3831250-1 08/27/22 06:01 • (LCSD) R3831250-2 08/27/22 06:41

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	3.40	3.41	90.7	90.9	70.0-130			0.294	25
Tetrachloroethylene	3.75	3.30	3.27	88.0	87.2	70.0-130			0.913	25
Tetrahydrofuran	3.75	4.74	4.65	126	124	70.0-137			1.92	25
Toluene	3.75	3.47	3.46	92.5	92.3	70.0-130			0.289	25
1,2,4-Trichlorobenzene	3.75	2.96	3.02	78.9	80.5	70.0-160			2.01	25
1,1,1-Trichloroethane	3.75	3.46	3.44	92.3	91.7	70.0-130			0.580	25
1,1,2-Trichloroethane	3.75	3.40	3.35	90.7	89.3	70.0-130			1.48	25
Trichloroethylene	3.75	3.38	3.39	90.1	90.4	70.0-130			0.295	25
1,2,4-Trimethylbenzene	3.75	3.63	3.66	96.8	97.6	70.0-130			0.823	25
1,3,5-Trimethylbenzene	3.75	3.55	3.52	94.7	93.9	70.0-130			0.849	25
2,2,4-Trimethylpentane	3.75	4.38	4.52	117	121	70.0-130			3.15	25
Vinyl chloride	3.75	3.31	3.28	88.3	87.5	70.0-130			0.910	25
Vinyl Bromide	3.75	2.81	2.72	74.9	72.5	70.0-130			3.25	25
Vinyl acetate	3.75	4.32	4.17	115	111	70.0-130			3.53	25
m&p-Xylene	7.50	7.22	7.23	96.3	96.4	70.0-130			0.138	25
o-Xylene	3.75	3.55	3.59	94.7	95.7	70.0-130			1.12	25
(S) 1,4-Bromofluorobenzene				101	103	60.0-140				

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Cp

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Tc

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Cn

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Tr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3831982-3 08/29/22 10:58

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	102			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3831982-1 08/29/22 09:32 • (LCSD) R3831982-2 08/29/22 10:15

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	4.50	4.68	120	125	70.0-130			3.92	25
Heptane	3.75	4.19	4.23	112	113	70.0-130			0.950	25
TPH (GC/MS) Low Fraction	203	259	261	128	129	70.0-130			0.769	25
(S) 1,4-Bromofluorobenzene				103	105	60.0-140				

1

Cp

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Tc

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Ss

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Cn

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Tr

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Sr

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Qc

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Gl

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Al

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Sc

Volatile Organic Compounds (MS) by Method TO-15

L1529720-01

Method Blank (MB)

(MB) R3832516-3 08/31/22 09:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	100			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3832516-1 08/31/22 08:39 • (LCSD) R3832516-2 08/31/22 09:19

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
n-Hexane	3.75	4.22	4.08	113	109	70.0-130			3.37	25
(S) 1,4-Bromofluorobenzene				99.8	100	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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ANALYTICAL REPORT

September 08, 2022

Ensolum, LLC

Sample Delivery Group: L1532046
Samples Received: 09/02/2022
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

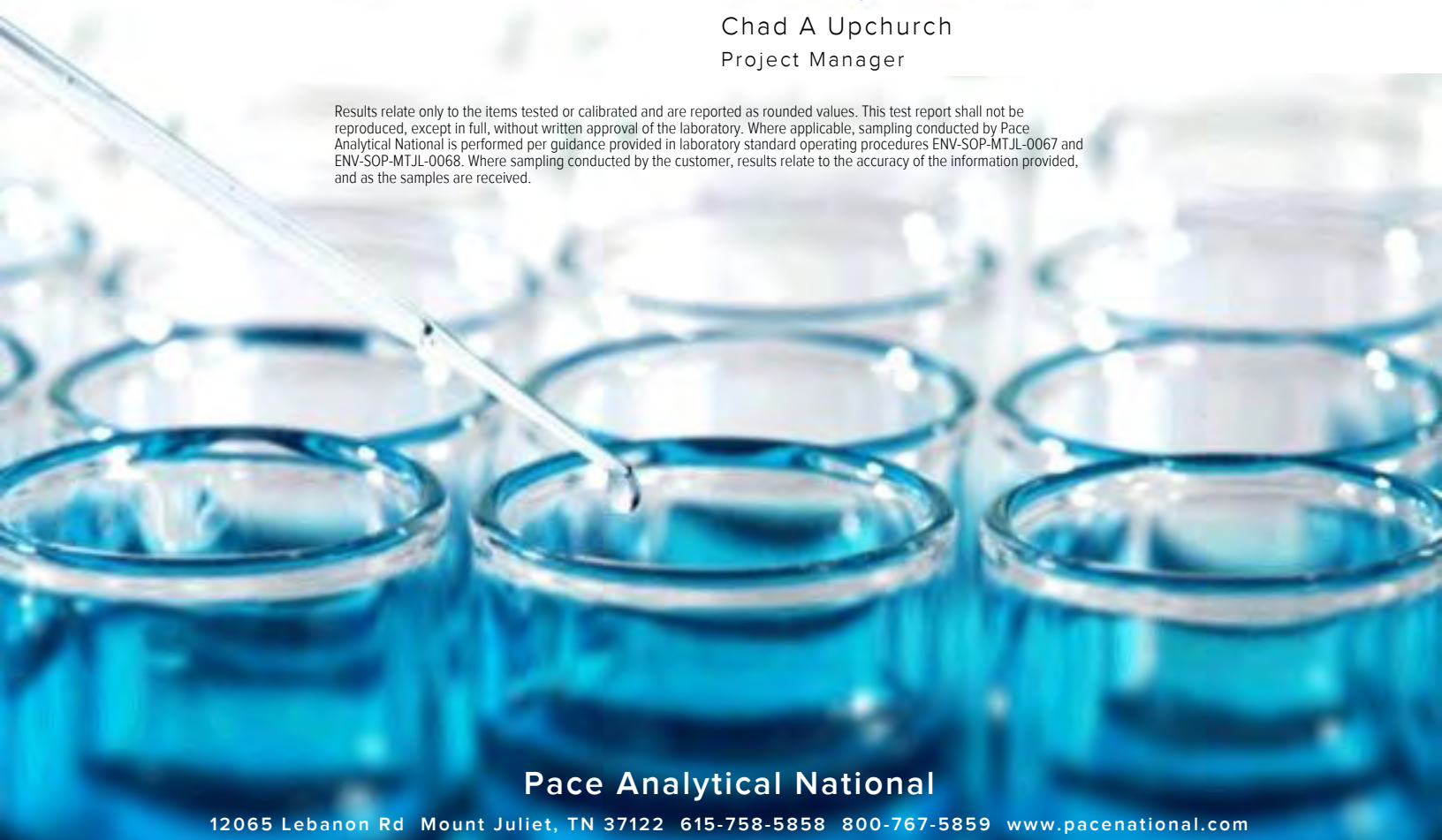


Entire Report Reviewed By:

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
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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
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Al: Accreditations & Locations	17	
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		¹⁰ Sc

LEVEY WELL L1532046-01 Air

Collected by
Shane Diller

Collected date/time
08/31/22 12:47

Received date/time
09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1922475	400	09/07/22 12:46	09/07/22 12:46	DBB	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1923138	4000	09/08/22 11:23	09/08/22 11:23	SDS	Mt. Juliet, TN

¹Cp

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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

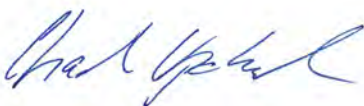
¹⁰ Sc

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: 09/08/2022 18:59				
Project Name: Levey Well			Laboratory Job Number: L1532046-01				
Reviewer Name: Chad A Upchurch			Prep Batch Number(s): WG1922475 and WG1923138				
# 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: 09/08/2022 18:59					
Project Name: Levey Well		Laboratory Job Number: L1532046-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1922475 and WG1923138					
# 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: 09/08/2022 18:59	
Project Name: Levey Well		Laboratory Job Number: L1532046-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG1922475 and WG1923138	
ER #¹	Description		
1	TO-15 WG1922475 L1532046-01: 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: 08/31/22 12:47

L1532046

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	500	1190	132000	314000	E	400	WG1922475
Allyl chloride	107-05-1	76.53	80.0	250	ND	ND		400	WG1922475
Benzene	71-43-2	78.10	80.0	256	ND	ND		400	WG1922475
Benzyl Chloride	100-44-7	127	80.0	416	ND	ND		400	WG1922475
Bromodichloromethane	75-27-4	164	80.0	537	ND	ND		400	WG1922475
Bromoform	75-25-2	253	240	2480	ND	ND		400	WG1922475
Bromomethane	74-83-9	94.90	80.0	311	ND	ND		400	WG1922475
1,3-Butadiene	106-99-0	54.10	800	1770	ND	ND		400	WG1922475
Carbon disulfide	75-15-0	76.10	80.0	249	ND	ND		400	WG1922475
Carbon tetrachloride	56-23-5	154	80.0	504	ND	ND		400	WG1922475
Chlorobenzene	108-90-7	113	80.0	370	ND	ND		400	WG1922475
Chloroethane	75-00-3	64.50	80.0	211	ND	ND		400	WG1922475
Chloroform	67-66-3	119	80.0	389	ND	ND		400	WG1922475
Chloromethane	74-87-3	50.50	80.0	165	ND	ND		400	WG1922475
2-Chlorotoluene	95-49-8	126	80.0	412	ND	ND		400	WG1922475
Cyclohexane	110-82-7	84.20	80.0	276	20700	71300		400	WG1922475
Dibromochloromethane	124-48-1	208	80.0	681	ND	ND		400	WG1922475
1,2-Dibromoethane	106-93-4	188	80.0	615	ND	ND		400	WG1922475
1,2-Dichlorobenzene	95-50-1	147	80.0	481	ND	ND		400	WG1922475
1,3-Dichlorobenzene	541-73-1	147	80.0	481	ND	ND		400	WG1922475
1,4-Dichlorobenzene	106-46-7	147	80.0	481	ND	ND		400	WG1922475
1,2-Dichloroethane	107-06-2	99	80.0	324	ND	ND		400	WG1922475
1,1-Dichloroethane	75-34-3	98	80.0	321	ND	ND		400	WG1922475
1,1-Dichloroethene	75-35-4	96.90	80.0	317	ND	ND		400	WG1922475
cis-1,2-Dichloroethene	156-59-2	96.90	80.0	317	ND	ND		400	WG1922475
trans-1,2-Dichloroethene	156-60-5	96.90	80.0	317	ND	ND		400	WG1922475
1,2-Dichloropropane	78-87-5	113	80.0	370	ND	ND		400	WG1922475
cis-1,3-Dichloropropene	10061-01-5	111	80.0	363	ND	ND		400	WG1922475
trans-1,3-Dichloropropene	10061-02-6	111	80.0	363	ND	ND		400	WG1922475
1,4-Dioxane	123-91-1	88.10	80.0	288	ND	ND		400	WG1922475
Ethanol	64-17-5	46.10	500	943	756	1430	B	400	WG1922475
Ethylbenzene	100-41-4	106	80.0	347	ND	ND		400	WG1922475
4-Ethyltoluene	622-96-8	120	80.0	393	ND	ND		400	WG1922475
Trichlorofluoromethane	75-69-4	137.40	80.0	450	ND	ND		400	WG1922475
Dichlorodifluoromethane	75-71-8	120.92	80.0	396	ND	ND		400	WG1922475
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	80.0	613	ND	ND		400	WG1922475
1,2-Dichlorotetrafluoroethane	76-14-2	171	80.0	560	ND	ND		400	WG1922475
Heptane	142-82-5	100	80.0	327	27400	112000		400	WG1922475
Hexachloro-1,3-butadiene	87-68-3	261	252	2690	ND	ND		400	WG1922475
n-Hexane	110-54-3	86.20	2520	8880	272000	959000		4000	WG1923138
Isopropylbenzene	98-82-8	120.20	80.0	393	ND	ND		400	WG1922475
Methylene Chloride	75-09-2	84.90	80.0	278	ND	ND		400	WG1922475
Methyl Butyl Ketone	591-78-6	100	500	2040	ND	ND		400	WG1922475
2-Butanone (MEK)	78-93-3	72.10	500	1470	1240	3660		400	WG1922475
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	500	2050	1350	5530		400	WG1922475
Methyl methacrylate	80-62-6	100.12	80.0	328	ND	ND		400	WG1922475
MTBE	1634-04-4	88.10	80.0	288	ND	ND		400	WG1922475
Naphthalene	91-20-3	128	252	1320	ND	ND		400	WG1922475
2-Propanol	67-63-0	60.10	500	1230	6720	16500		400	WG1922475
Propene	115-07-1	42.10	500	861	ND	ND		400	WG1922475
Styrene	100-42-5	104	80.0	340	ND	ND		400	WG1922475
1,1,2,2-Tetrachloroethane	79-34-5	168	80.0	550	ND	ND		400	WG1922475
Tetrachloroethylene	127-18-4	166	80.0	543	ND	ND		400	WG1922475
Tetrahydrofuran	109-99-9	72.10	80.0	236	ND	ND		400	WG1922475
Toluene	108-88-3	92.10	200	753	ND	ND		400	WG1922475
1,2,4-Trichlorobenzene	120-82-1	181	252	1870	ND	ND		400	WG1922475

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 08/31/22 12:47

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	80.0	435	ND	ND		400	WG1922475
1,1,2-Trichloroethane	79-00-5	133	80.0	435	ND	ND		400	WG1922475
Trichloroethylene	79-01-6	131	80.0	429	ND	ND		400	WG1922475
1,2,4-Trimethylbenzene	95-63-6	120	80.0	393	ND	ND		400	WG1922475
1,3,5-Trimethylbenzene	108-67-8	120	80.0	393	ND	ND		400	WG1922475
2,2,4-Trimethylpentane	540-84-1	114.22	80.0	374	ND	ND		400	WG1922475
Vinyl chloride	75-01-4	62.50	80.0	204	ND	ND		400	WG1922475
Vinyl Bromide	593-60-2	106.95	80.0	350	ND	ND		400	WG1922475
Vinyl acetate	108-05-4	86.10	80.0	282	ND	ND		400	WG1922475
m&p-Xylene	1330-20-7	106	160	694	ND	ND		400	WG1922475
o-Xylene	95-47-6	106	80.0	347	ND	ND		400	WG1922475
TPH (GC/MS) Low Fraction	8006-61-9	101	80000	330000	601000	2480000		400	WG1922475
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.6				WG1922475
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.0				WG1923138

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3834675-3 09/07/22 09:53

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	0.272	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

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1532046-01

Method Blank (MB)

(MB) R3834675-3 09/07/22 09:53

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	0.203	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	61.6	U	39.7	200
(S) 1,4-Bromofluorobenzene	96.2			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3834675-1 09/07/22 08:51 • (LCSD) R3834675-2 09/07/22 09:23

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	3.78	3.78	101	101	70.0-130			0.000	25
Allyl Chloride	3.75	3.13	3.12	83.5	83.2	70.0-130			0.320	25
Benzene	3.75	3.84	3.86	102	103	70.0-130			0.519	25
Benzyl Chloride	3.75	3.69	3.65	98.4	97.3	70.0-152			1.09	25
Bromodichloromethane	3.75	3.79	3.77	101	101	70.0-130			0.529	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3834675-1 09/07/22 08:51 • (LCSD) R3834675-2 09/07/22 09:23

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	4.03	3.93	107	105	70.0-130			2.51	25
Bromomethane	3.75	3.73	3.70	99.5	98.7	70.0-130			0.808	25
1,3-Butadiene	3.75	3.56	3.59	94.9	95.7	70.0-130			0.839	25
Carbon disulfide	3.75	3.52	3.50	93.9	93.3	70.0-130			0.570	25
Carbon tetrachloride	3.75	3.70	3.71	98.7	98.9	70.0-130			0.270	25
Chlorobenzene	3.75	4.12	4.14	110	110	70.0-130			0.484	25
Chloroethane	3.75	3.53	3.50	94.1	93.3	70.0-130			0.853	25
Chloroform	3.75	3.80	3.84	101	102	70.0-130			1.05	25
Chloromethane	3.75	3.65	3.58	97.3	95.5	70.0-130			1.94	25
2-Chlorotoluene	3.75	3.95	3.93	105	105	70.0-130			0.508	25
Cyclohexane	3.75	3.66	3.69	97.6	98.4	70.0-130			0.816	25
Dibromochloromethane	3.75	4.10	4.07	109	109	70.0-130			0.734	25
1,2-Dibromoethane	3.75	4.22	4.17	113	111	70.0-130			1.19	25
1,2-Dichlorobenzene	3.75	4.14	4.09	110	109	70.0-130			1.22	25
1,3-Dichlorobenzene	3.75	4.20	4.19	112	112	70.0-130			0.238	25
1,4-Dichlorobenzene	3.75	4.28	4.22	114	113	70.0-130			1.41	25
1,2-Dichloroethane	3.75	3.67	3.64	97.9	97.1	70.0-130			0.821	25
1,1-Dichloroethane	3.75	3.59	3.60	95.7	96.0	70.0-130			0.278	25
1,1-Dichloroethene	3.75	3.51	3.49	93.6	93.1	70.0-130			0.571	25
cis-1,2-Dichloroethene	3.75	3.66	3.64	97.6	97.1	70.0-130			0.548	25
trans-1,2-Dichloroethene	3.75	3.37	3.44	89.9	91.7	70.0-130			2.06	25
1,2-Dichloropropane	3.75	3.77	3.83	101	102	70.0-130			1.58	25
cis-1,3-Dichloropropene	3.75	3.67	3.67	97.9	97.9	70.0-130			0.000	25
trans-1,3-Dichloropropene	3.75	3.67	3.72	97.9	99.2	70.0-130			1.35	25
1,4-Dioxane	3.75	3.71	3.75	98.9	100	70.0-140			1.07	25
Ethanol	3.75	3.77	3.75	101	100	55.0-148			0.532	25
Ethylbenzene	3.75	3.87	3.85	103	103	70.0-130			0.518	25
4-Ethyltoluene	3.75	4.01	3.91	107	104	70.0-130			2.53	25
Trichlorofluoromethane	3.75	3.80	3.84	101	102	70.0-130			1.05	25
Dichlorodifluoromethane	3.75	4.02	4.12	107	110	64.0-139			2.46	25
1,1,2-Trichlorotrifluoroethane	3.75	3.66	3.65	97.6	97.3	70.0-130			0.274	25
1,2-Dichlorotetrafluoroethane	3.75	3.88	3.92	103	105	70.0-130			1.03	25
Heptane	3.75	3.63	3.62	96.8	96.5	70.0-130			0.276	25
Hexachloro-1,3-butadiene	3.75	4.29	4.31	114	115	70.0-151			0.465	25
Isopropylbenzene	3.75	3.97	3.89	106	104	70.0-130			2.04	25
Methylene Chloride	3.75	3.35	3.31	89.3	88.3	70.0-130			1.20	25
Methyl Butyl Ketone	3.75	3.80	3.78	101	101	70.0-149			0.528	25
Methyl Ethyl Ketone	3.75	3.57	3.52	95.2	93.9	70.0-130			1.41	25
4-Methyl-2-pentanone (MIBK)	3.75	4.16	4.25	111	113	70.0-139			2.14	25
Methyl Methacrylate	3.75	3.72	3.72	99.2	99.2	70.0-130			0.000	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3834675-1 09/07/22 08:51 • (LCSD) R3834675-2 09/07/22 09:23

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 %
MTBE	3.75	3.67	3.71	97.9	98.9	70.0-130			1.08	25
Naphthalene	3.75	4.08	4.08	109	109	70.0-159			0.000	25
2-Propanol	3.75	3.34	3.38	89.1	90.1	70.0-139			1.19	25
Propene	3.75	3.92	3.99	105	106	64.0-144			1.77	25
Styrene	3.75	3.91	3.89	104	104	70.0-130			0.513	25
1,1,2,2-Tetrachloroethane	3.75	4.03	4.02	107	107	70.0-130			0.248	25
Tetrachloroethylene	3.75	4.51	4.48	120	119	70.0-130			0.667	25
Tetrahydrofuran	3.75	3.28	3.32	87.5	88.5	70.0-137			1.21	25
Toluene	3.75	3.99	3.99	106	106	70.0-130			0.000	25
1,2,4-Trichlorobenzene	3.75	4.30	4.29	115	114	70.0-160			0.233	25
1,1,1-Trichloroethane	3.75	3.66	3.66	97.6	97.6	70.0-130			0.000	25
1,1,2-Trichloroethane	3.75	4.03	4.05	107	108	70.0-130			0.495	25
Trichloroethylene	3.75	4.11	4.13	110	110	70.0-130			0.485	25
1,2,4-Trimethylbenzene	3.75	4.05	3.99	108	106	70.0-130			1.49	25
1,3,5-Trimethylbenzene	3.75	3.99	3.98	106	106	70.0-130			0.251	25
2,2,4-Trimethylpentane	3.75	3.54	3.54	94.4	94.4	70.0-130			0.000	25
Vinyl chloride	3.75	3.59	3.59	95.7	95.7	70.0-130			0.000	25
Vinyl Bromide	3.75	3.79	3.80	101	101	70.0-130			0.264	25
Vinyl acetate	3.75	3.27	3.22	87.2	85.9	70.0-130			1.54	25
m&p-Xylene	7.50	8.06	7.97	107	106	70.0-130			1.12	25
o-Xylene	3.75	3.95	3.92	105	105	70.0-130			0.762	25
TPH (GC/MS) Low Fraction	203	245	244	121	120	70.0-130			0.409	25
(S) 1,4-Bromofluorobenzene				97.6	96.1	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3835000-3 09/08/22 10:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	94.3			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3835000-1 09/08/22 09:49 • (LCSD) R3835000-2 09/08/22 10:20

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	4.67	4.63	125	123	70.0-130			0.860	25
(S) 1,4-Bromofluorobenzene				103	102	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.
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.



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.

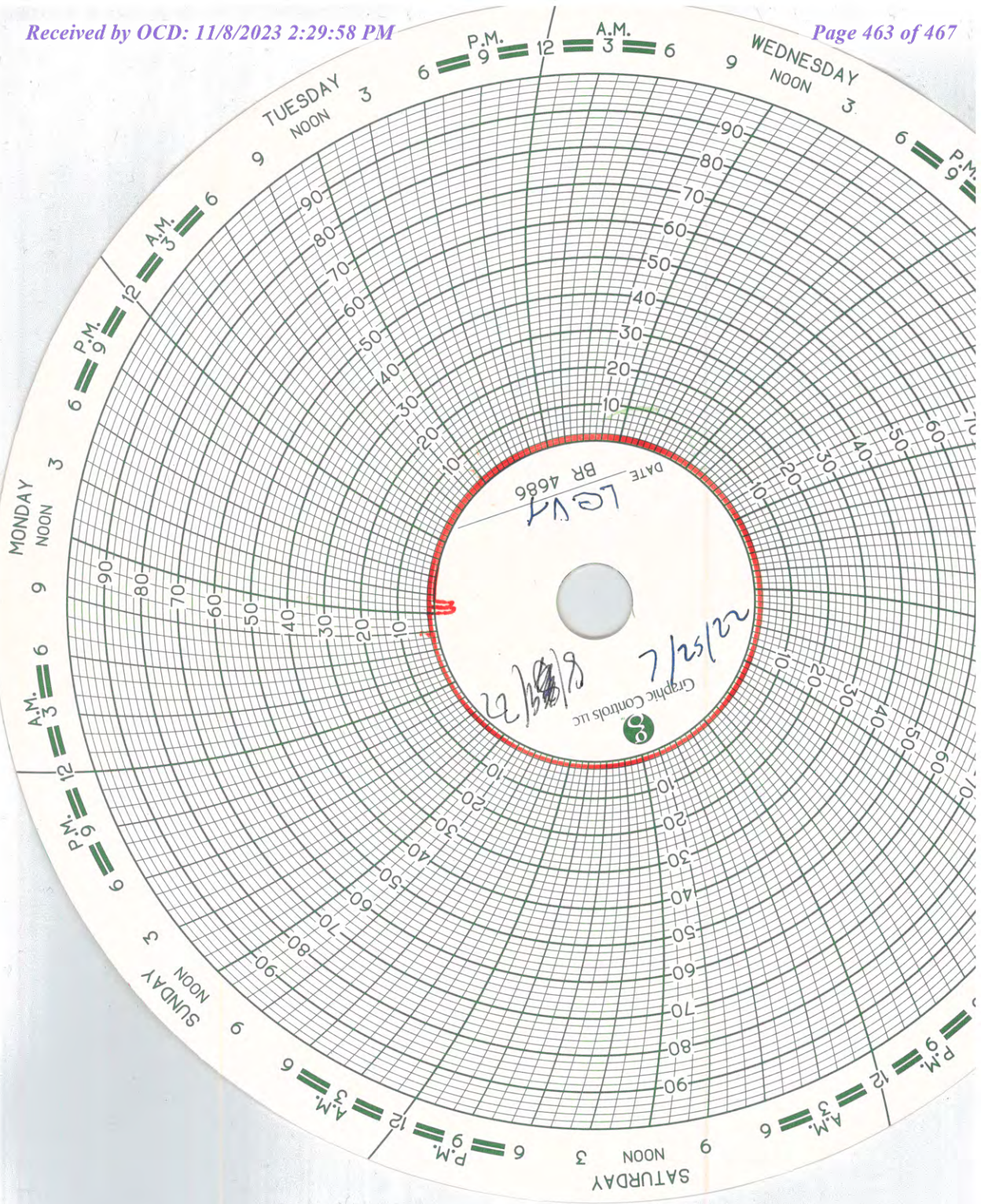


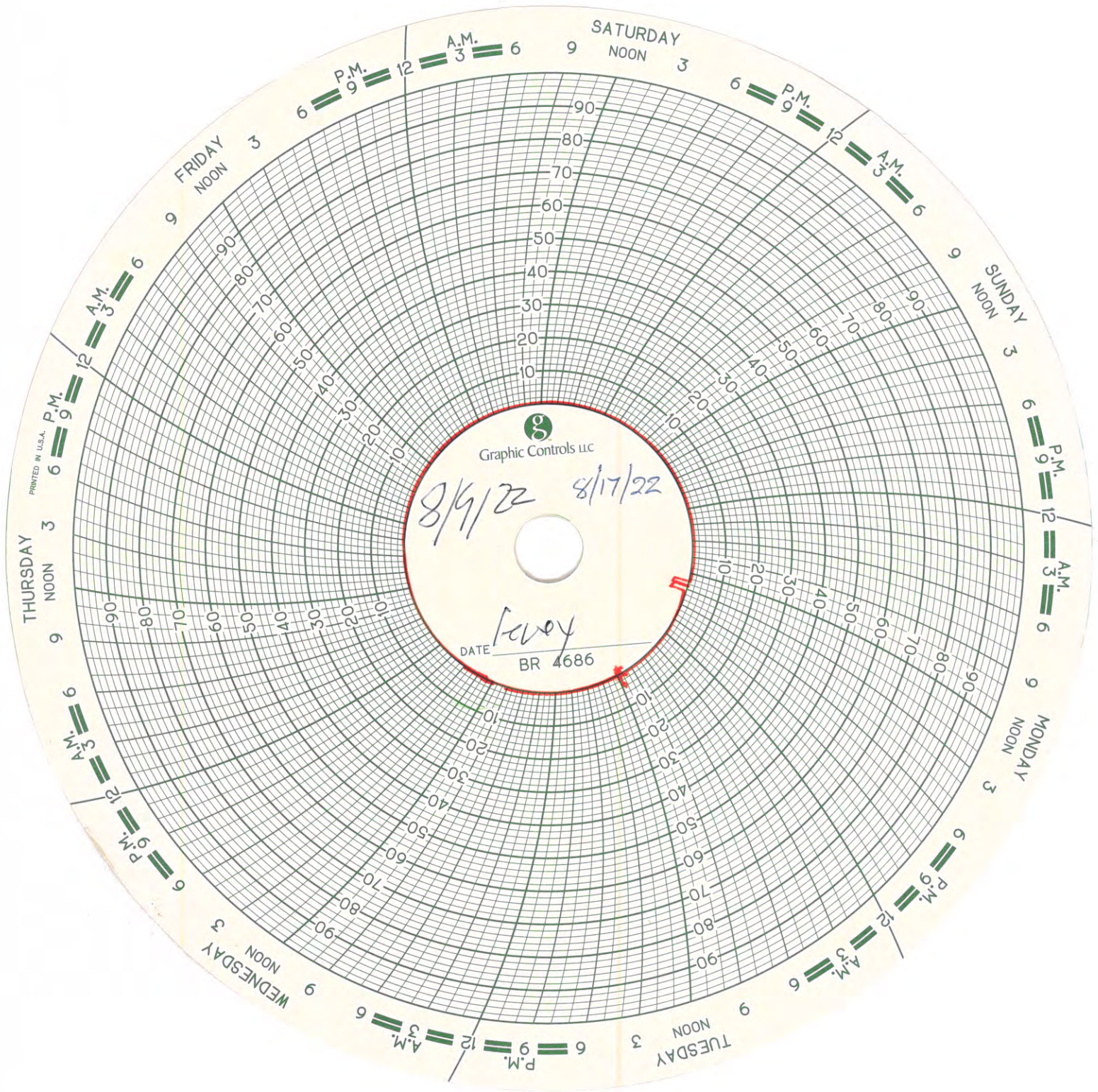
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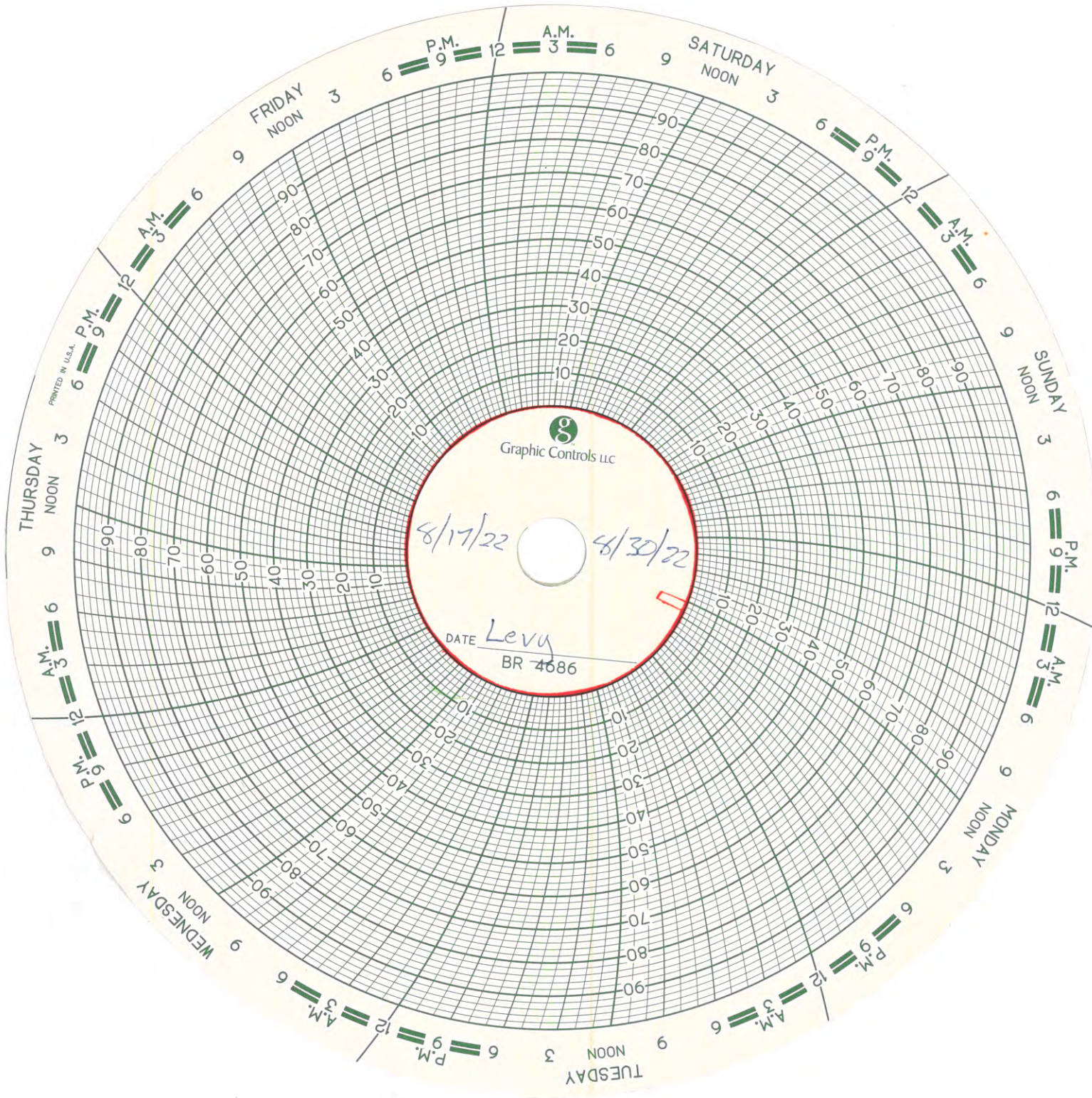


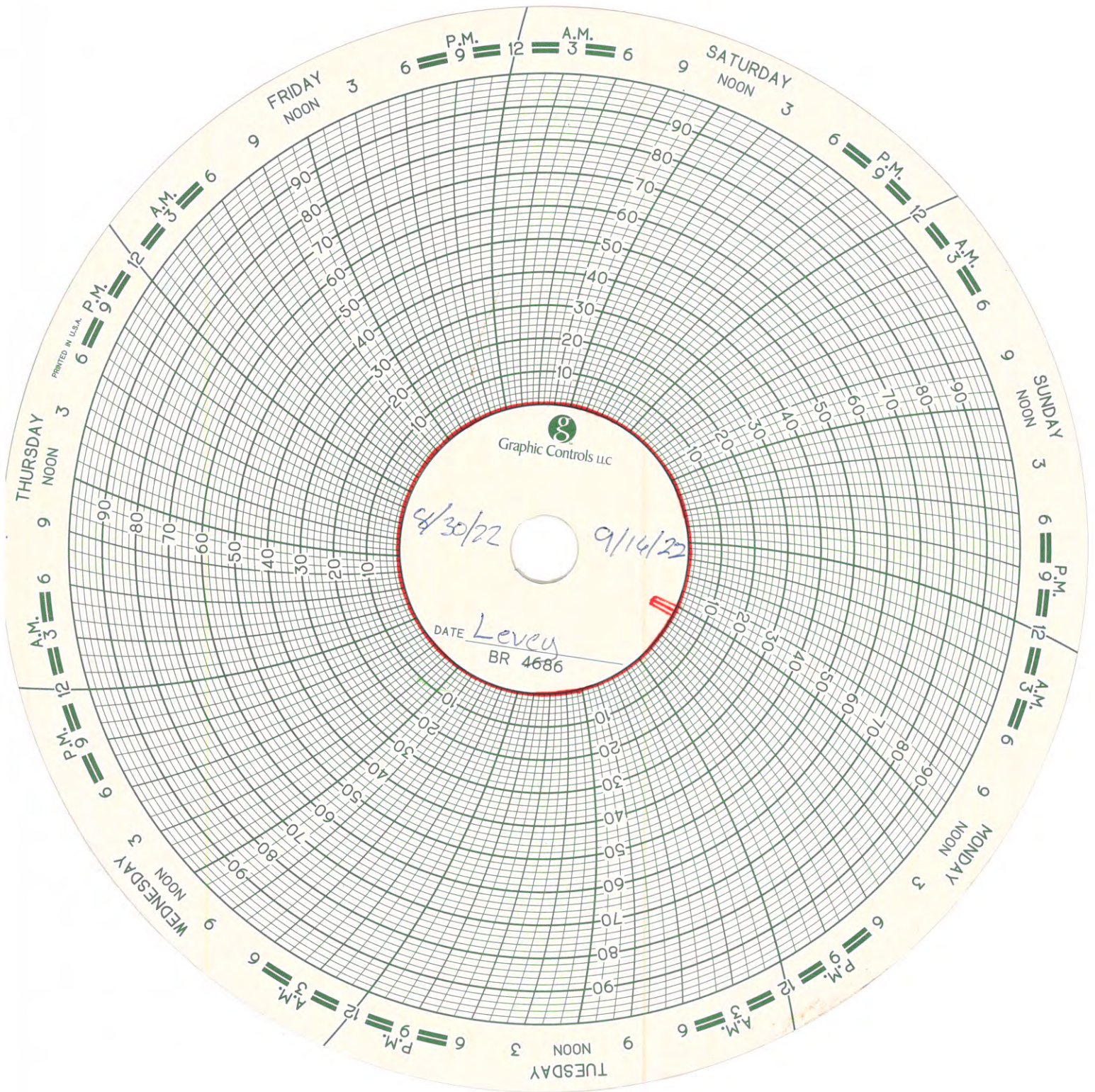
APPENDIX D

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 284044

CONDITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID:	157984
	Action Number:	284044
	Action Type:	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Accepted for the record: GAS MITIGATION MONTHLY REPORT - AUGUST 2022 South Hobbs G/SA Unit Unit F EMNRD OCD Order No. R-4934-F, Case No. 1498	3/20/2024