



GAS MITIGATION MONTHLY REPORT - JUNE 2023

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
Incident ID No. nAPP2227033082**

July 31, 2023

Prepared for:

**Occidental Permian LTD
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Midland, Texas 79706
Attn: Ms. Melissa Gilliland**

Prepared by:


Beaux Jennings
Senior Project Manager

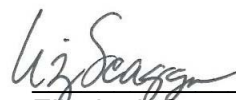

Elizabeth Scaggs, PG
Principal



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ENSOLUM

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Order No. R-4934-F, Case No. 14981
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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) Incident ID No. nAPP2227033082 Order No. R-4934-F Case No. 14981

This Gas Mitigation Monthly Report - June 2023 summarizes activities subsequent to the *Gas Mitigation Monthly Report - November 2021*, dated December 14, 2021, the *Gas Mitigation Monthly Report - December 2021*, dated January 20, 2022, the *Gas Mitigation Monthly Report - January 2022*, dated March 1, 2022, the *Gas Mitigation Monthly Report - February 2022*, dated March 24, 2022, the *Gas Mitigation Monthly Report - March 2022*, dated May 4, 2022, the *Gas Mitigation Monthly Report - April 2022*, dated July 11, 2022, the *Gas Mitigation Monthly Report - May 2022*, dated July 22, 2022 and the *Gas Mitigation Monthly Report - June 2022*, dated July 22, 2022, the *Gas Mitigation Monthly Report - July 2022*, dated September 1, 2022, the *Gas Mitigation Monthly Report - August 2022*, dated December 6, 2022, the *Gas Mitigation Monthly Report - September 2022*, dated December 6, 2022, the *Gas Mitigation Monthly Report - October 2022*, dated January 20, 2022, the *Gas Mitigation Monthly Report - December 2022*, dated March 9, 2023, the *Gas Mitigation Monthly Report - January 2023*, dated March 9, 2023, the *Gas Mitigation Monthly Report – February 2023*, dated June 20, 2023, the *Gas Mitigation Monthly Report – March 2023*, dated June 20, 2023, the *Gas Mitigation Monthly Report - April 2023*, dated June 20, 2023, and the *Gas Mitigation Monthly Report - May 2023*, dated July 31, 2023 . 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”.

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

On June 30, 2019, elevated pressure was observed at the Levey Well. At the request of the New Mexico Oil Conservation Division (NMOCD), localized area wells were “shut in” from operational use. Over time, the pressure being observed at the Levey Well declined until pressure was no longer recorded. Observations and water analysis of the Levey water well did identify free gas in the well bore; however, pressure from the underlying groundwater-bearing zone was no longer present. Operational data was analyzed as part of the area wide assessment and adjacent wells investigated as potential sources for the gas infiltration. During maintenance operations at SHU #183, located approximately 575 feet southwest of the Levey Well, the SHU #183 well string was pulled, and pressures measured for proof of casing integrity. During these operations, SHU #183 was found to have a casing leak, which is believed to be the source of the pressure observed at Levey well. In response, OXY plugged the SHU #183 well to the 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 June 26, 2023. 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.

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During the June 2023 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, Nitrite as N and TDS. Benzene concentrations ranged from 0.0123 milligrams per liter (mg/L) to 0.0180 mg/L in monitoring well MW-2. In addition, several Nitrite as N exceedances ranging from 1.01 mg/L to 6.73 mg/L were observed in the Levey Well as well as monitoring wells MW-1 and MW-2. TDS concentrations ranged from 1,180 mg/L to 1,380 mg/L in the Levey Well. Although above the GQS, these TDS concentrations are consistent with background levels in the Quaternary Alluvium, Ogallala Formation, and the Dockum Group (i.e., the three groundwater bearing units) in Southern Lea County (Nicholson and Clebsch, 1961). The groundwater analytical summary tables are included in **Appendix B**.

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

To mitigate potential exposures, the Levey residence was purchased by OXY and remains unoccupied. A passive vent was installed on the Levey Well to mitigate safety and explosivity concerns for the residential and work area. There has been no detectable build-up of pressure in the Levey Well or monitoring wells MW-1 and MW-2. Hydrogen sulfide (H₂S) has not been detected in any of the three aforementioned wells since July 15, 2020. All detections of H₂S prior to July 15, 2020 were within the well bore. No H₂S 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 6/26/2023, with no pressure observed in either monitoring well. The pressure reading chart available for June 2023 is included in **Appendix D**.

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

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

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

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

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

1.2 Groundwater Recovery – Levey Well

As of July 1, 2021, the Levey Well has run full time and recovered groundwater is transferred via flowline to a nearby tank for proper disposal. The groundwater recovered from the Levey Well during June 1 - 26, 2023 was approximately 649,096 gallons.

1.3 Gas Recovery – Levey Well

OXY conducted one vacuum recovery event during the month of June 2023 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 July 2023 once every two weeks until the sampling results of the air are minimal after displacement of the overlying pressure, or the process proves to become ineffective.

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2.0 AIR AND GROUNDWATER MONITORING

2.1 Air Sampling Program

Levey Well

The air samples from June 26, 2023, were taken prior to, during, and subsequent to the vacuum recovery event 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 June 26, 2023 vacuum recovery event, 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 June 2023 sampling event 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 has been active since 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.

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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 Midland 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 July 2023. 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 ethylbenzene, n-hexane, m&p-xylene, o-xylene, and/or TPH were observed prior to the initiation of each vacuum recovery event.

Once initiated, an air sample is taken at one hour and two hours into the vacuum recovery event. During each of the vacuum recovery events, ethylbenzene, n-hexane, m&p-xylene, o-xylene, 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. Elevated concentrations of acetone, cyclohexane, ethanol, ethylbenzene, 4-ethyltoluene, heptane, n-hexane, isopropylbenzene, 2-propanol, toluene, 1,2,4-trimethylbenzene, m&p-xylene, o-xylene, 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.

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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 ethylbenzene, 4-ethyltoluene, heptane, n-hexane, isopropylbenzene, 2-propanol, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m&p-xylene, o-xylene, 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 June 2023 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 concentrations of 1,180 mg/L to 1,380 mg/L were observed during the June 2023 sampling. 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, the March 9, 2022, which had a benzene analytical result of 0.00552 mg/L, and the January 25, 2023, which had a benzene analytical result of 0.00589 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 0.0123 mg/L to 0.0180 mg/L, which exceed the WQCC GQS of 0.005 mg/L.

In addition, several Nitrite as N exceedances ranging from 1.01 mg/L to 6.73 mg/L were observed in the Levey Well as well as monitoring wells MW-1 and MW-2, which is above the WQCC GQS of 1.0 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.

OXY requests from the NMOCD moving forward in 2023 to:

- **Plug and abandon the Levey Well and monitoring well MW-1;**
- **Remove impacted groundwater utilizing monitoring well MW-2 full time. The recovered groundwater will be transferred via flowline to a nearby tank for proper disposal. Groundwater removal will continue until acceptable levels achieving compliance expectations are complete;**
- **Implement monthly sampling for water and air on monitoring well MW-2 moving forward in 2023;**
- **Utilizing monitoring well MW-2, 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 utilizing monitoring well MW-2, as described in Section 2.1; and**
- **Continue to monitor 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.**

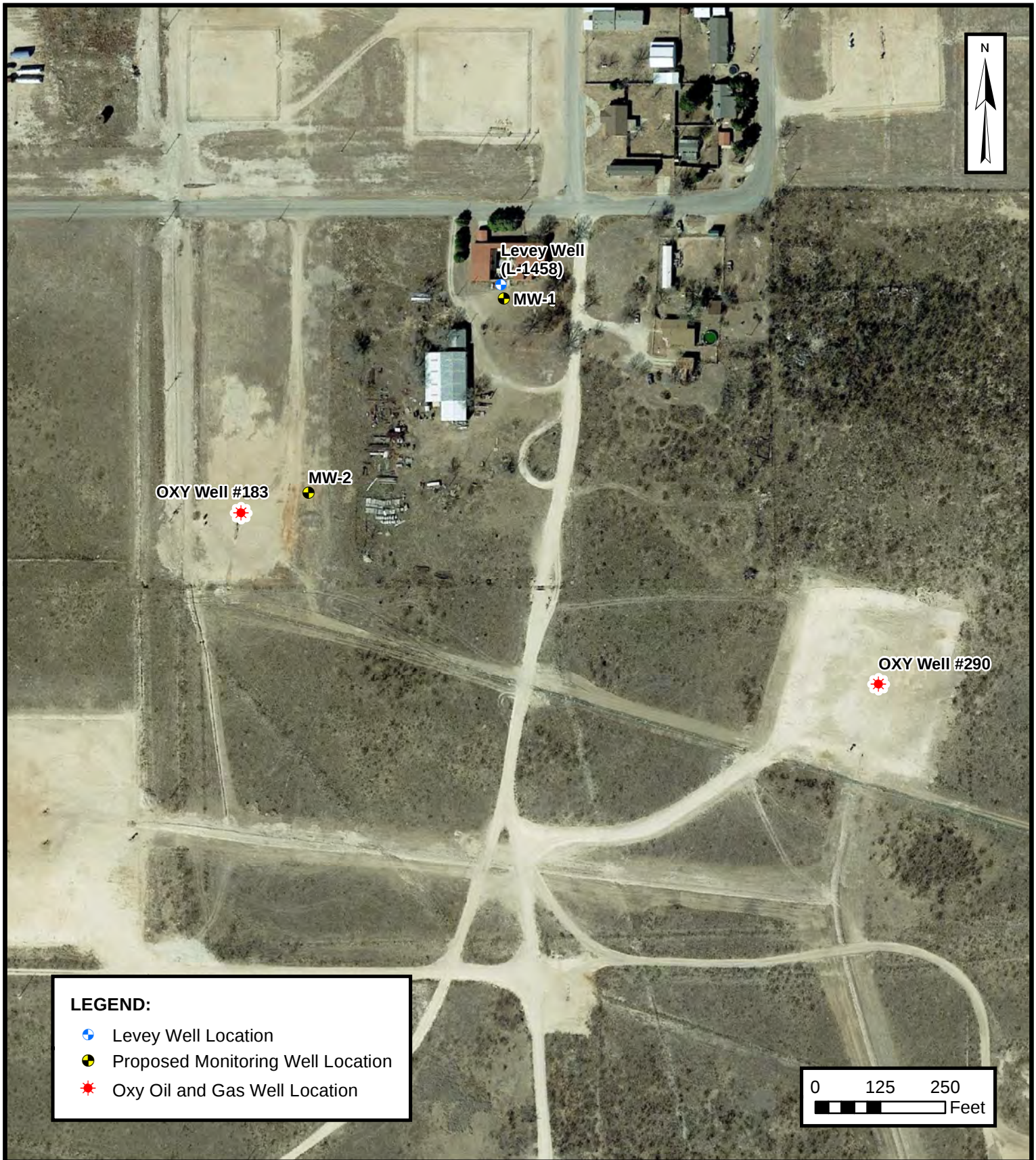
5.0 REFERENCES

- 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 in groundwater. 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



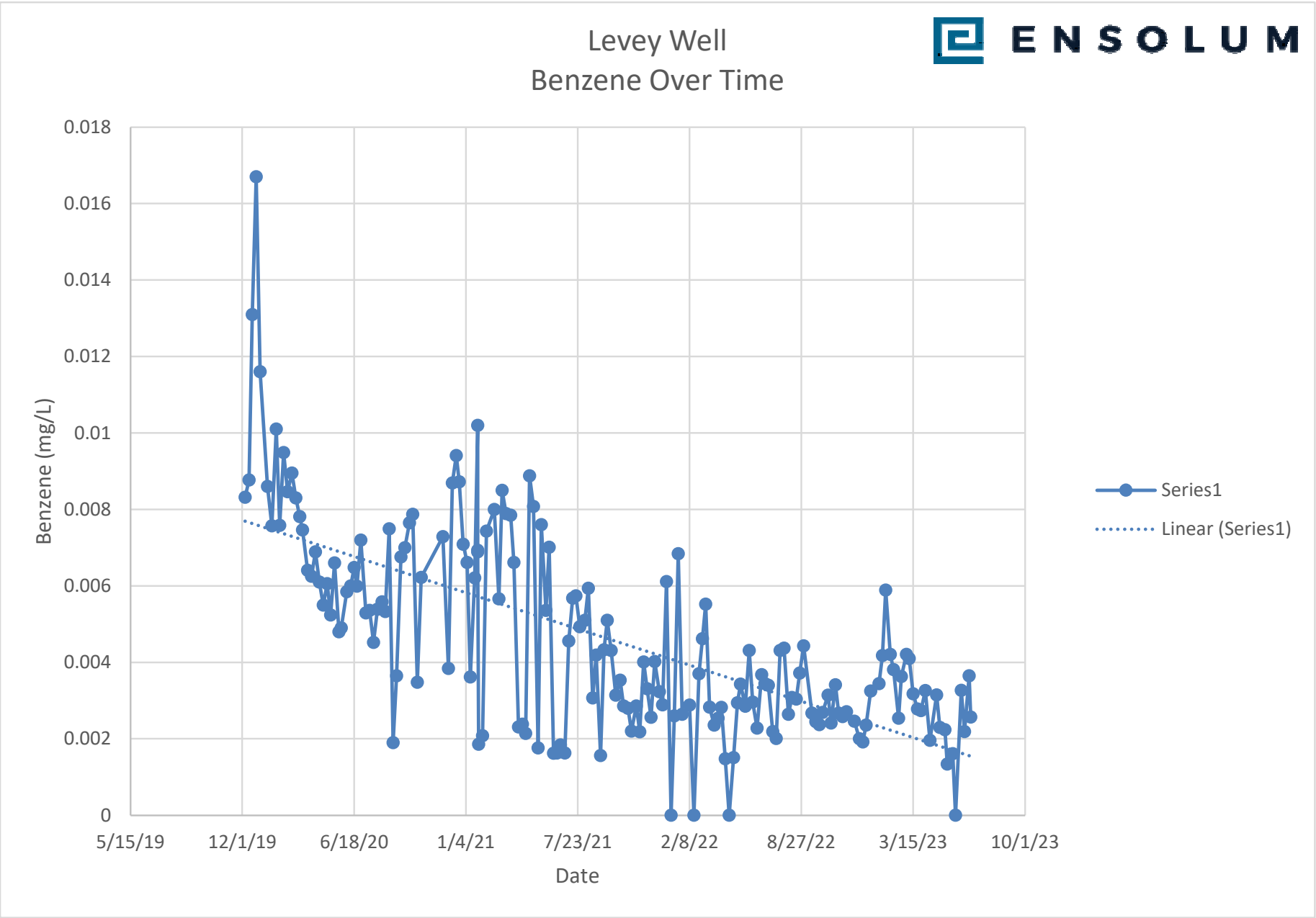
SITE MAP

OCCIDENTAL PERMIAN LTD
S HOBBS G/SA UNIT
Unit F, Sec 5, T19S, R38E, Hobbs, New Mexico
32.690683° N, 103.173158° W

PROJECT NUMBER: 03B1417002

FIGURE

1





APPENDIX B

Tables



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	10/4/2022	0.515	200	0.740	0.396	<0.0293	45.0	242	50.2	4.07	78.2	706	456	<4.00	4.21	6.6
	10/14/2022	0.495 J	212	0.655	0.464	<0.0293	49.1	208	42.7	3.22	68.5	1,250	719	<4.00	-16.5	6.3
	10/19/2022	1.08 J	206	0.612 J	0.359	<0.0293	46.0	250	51.3	4.05	81.9	1,340	676	<4.00	-5.64	6.6
	10/27/2022	0.412 J	201	0.631	0.0757 J	0.690	40.1	322	64.8	5.47	95.2	977	740	<4.00	3.53	6.4
	11/2/2022	0.473 J	216	0.509	0.165	<0.0293	46.1	247	49.2	4.26	76.4	1,230	681	<4.00	-6.86	6.3
	11/9/2022	0.461 J	218	0.683	0.0934 J	<0.0293	46.5	238	44.2	3.36	73.3	1,450	708	<4.00	-11.0	6.5
	11/16/2022	0.480 J	219	0.493 J	0.154	<0.0293	47.5	250	50.0	4.20	78.0	1,340	611	<4.00	-3.43	6.8
	11/30/2022	0.487 J	218	0.710	0.0811 J	<0.0293	44.9	208	43.2	3.12	70.9	1,270	618	<4.00	-11.7	6.7
	12/9/2022	0.335 J	206	0.685	0.153	0.108	40.5	244	49.3	3.61	62.9	1,170	626	<4.00	-5.72	6.5
	12/15/2022	0.311 J	211	0.628	0.137	<0.0293	40.5	254	48.3	4.05	76.3	956	440	<4.00	6.29	6.3
	12/21/2022	0.392 J	214	0.732	0.144	<0.0293	44.5	258	49.1	4.69	80.4	1,130	656	<4.00	-3.79	6.5
	12/29/2022	0.515	209	0.568	10.4	2.66	43.5	242	45.9	3.93	74.9	1,060	670	<4.00	-7.08	6.6
	1/4/2023	Electrical Failure, Unable to Sample.														
	1/13/2023	0.562	292	0.202 J	0.227	<0.0293	35.2	393	71.7	6.96	125	1,800	949	<4.00	1.05	6.4
	1/19/2023	0.658	304	0.191 J	0.109	<0.0293	53.7	450	84.0	7.71	133	1,730	1,140	<4.00	0.441	6.3
	1/25/2023	0.525	298	0.207 J	0.0992 J	<0.0293	46.7	416	72.6	6.84	119	1,760	1,110	<4.00	-2.84	6.7
	2/2/2023	0.609	309	<0.100	0.256	<0.0293	43.5	366	69.4	6.39	113	1,680	1,120	<4.00	-8.22	6.4
	2/8/2023	0.514	224	0.443 J	0.108	<0.0293	44.6	228	46.7	4.18	78.0	1,230	704	<4.00	-11.0	6.7
	2/17/2023	0.403 J	231	0.632	0.0839 J	<0.0293	50.5	234	46.5	3.96	74.4	1,190	651	<4.00	-9.14	6.5
	2/22/2023	0.442 J	214	0.464 J	0.0849 J	<0.0293	46.8	246	50.4	4.19	78.6	1,160	732	<4.00	-8.94	6.3
	3/3/2023	0.457 J	327	0.148 J	0.0946 J	<0.0293	60.9	376	67.6	6.40	117	1,500	921	<4.00	-2.26	6.3
	3/8/2023	0.488 J	222	0.425 J	0.106	<0.0293	49.2	250	48.8	3.95	72.6	1,380	696	<4.00	-8.10	6.3
	3/15/2023	0.453 J	220	0.314 J	0.0651 J	<0.0293	49.2	224	43.1	3.66	70.0	1,030	691	<4.00	-12.3	6.3
	3/23/2023	0.454 J	221	0.896	0.0721 J	<0.0293	50.7	248	51.3	4.11	91.2	1,190	689	<4.00	-0.0255	6.5
	3/29/2023	0.438 J	217	0.504	0.0578 J	0.157	46.3	254	50.8	4.44	79.9	1,130	684	<4.00	-5.81	6.3
	4/6/2023	<0.0711	219	0.206 J	0.0769 J	<0.0293	47.4	249	49.4	4.08	79.7	1,080	680	<4.00	-6.66	6.7
	4/14/2023	<0.0711	219	0.229 J	0.0834 J	<0.0293	49.4	224	45.2	3.78	71.8	1,200	608	<4.00	-8.07	6.6
	4/26/2023	0.475 J	215	0.471 J	0.129	0.395	47.7	264	52.9	4.25	80.2	1,240	651	<4.00	-2.67	6.4
	5/2/2023	<0.0711	225	0.331 J	0.321	<0.0293	54.1	302	56.0	4.60	86.7	1,290	688	<4.00	-0.0776	6.4
	5/11/2023	0.400 J	216	0.400 J	10.4	2.66	44.9	236	51.7	4.41	82.0	1,680	637	<4.00	-7.60	6.5
	5/15/2023	0.326 J	214	0.789	0.243	0.793	47.8	202	41.3	3.26	67.1	1,320	547	<4.00	-9.15	6.5
	5/25/2023	0.348 J	217	0.617	0.0603 J	0.691	46.8	259	48.8	4.21	77.4	1,310	697	<4.00	-6.47	6.5
	5/30/2023	0.353 J	231	0.154 J	0.351	0.664	45.5	187	37.8	2.87	66.2	979	400	<4.00	-6.63	7.1
	6/9/2023	0.482 J	225	0.451 J	0.180	<0.0293	49.6	224	43.7	3.21	73.8	1,360	710	<4.00	-13.4	6.7
	6/15/2023	0.372 J	230	0.474 J	0.139	0.348	49.7	255	49.6	3.91	81.1	1,380	679	<4.00	-6.66	6.5
	6/23/2023	0.386 J	239	0.463 J	0.123	<0.0293	50.8	254	50.9	4.38	81.4	1,240	712	<4.00	-8.19	6.5
	6/26/2023	0.327 J	218	0.301 J	0.0682 J	2.51	45.0	260	42.3	3.70	69.4	1,180	719	<4.00	-8.99	6.5



TABLE 2
GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY
Levey Well
Oxy Permian Ltd.
Hobbs, New Mexico
Ensolum Project No. 03B1417001 / 03B1417002

Sample Designation	Date	(mg/L)													%	SU
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Cation-Anion Balance	pH
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9
MW-1	3/24/2022	NA	147	0.610	<0.0391	<0.0293	42.9			NA			297	<4.00	NA	7.2
	3/31/2022	NA	143	0.568	0.164	<0.0293	40.4			NA			275	<4.00	NA	7.1
	4/6/2022	NA	133	0.677	0.186	<0.0293	39.7			NA			262	<4.00	NA	7.1
	4/13/2022	NA	129	0.767	<0.0391	<0.0293	40.9			NA			259	<4.00	NA	7.6
	4/20/2022	NA	173	0.574	0.152	0.176	42.4			NA			362	<4.00	NA	7.0
	4/28/2022	NA	136	0.608	0.0700 J	0.0717 J	41.7			NA			300	<4.00	NA	7.5
	5/5/2022	NA	118	0.746	<0.0391	1.75	41.1			NA			253	<4.00	NA	7.2
	5/10/2022	NA	116	0.709	0.0815 J	<0.0293	43.9			NA			250	<4.00	NA	7.2
	5/19/2022	NA	106	0.643	0.0743 J	0.199	41.0			NA			262	<4.00	NA	7.1
	5/26/2022	NA	98.7	0.720	0.0777 J	0.809	44.7			NA			256	<4.00	NA	7.2
	6/1/2022	NA	100	0.690	0.0629 J	<0.0293	46.4			NA			240	<4.00	NA	7.4
	6/9/2022	NA	99.9	0.743	<0.0391	<0.0293	46.6			NA			246	<4.00	NA	7.1
	6/17/2022	NA	83.5	0.710	0.146	0.275	47.9			NA			253	<4.00	NA	7.3
	6/23/2022	NA	83.9	0.616	0.238	<0.0293	47.7			NA			258	<4.00	NA	7.2
	6/29/2022	NA	84.8	0.644	0.199	0.556	48.0			NA			264	<4.00	NA	7.2
	7/7/2022	NA	83.7	0.660	0.0413 J	0.0458 J	47.7			NA			238	<4.00	NA	7.4
	7/13/2022	NA	91.3	0.778	0.102	<0.0293	49.2			NA			253	<4.00	NA	7.2
	7/20/2022	NA	81.5	0.766	<0.0391	<0.0293	48.5			NA			249	<4.00	NA	7.2
	7/27/2022	NA	85.8	0.766	0.0482 J	<0.0293	47.2			NA			268	<4.00	NA	7.7
	8/4/2022	NA	77.5	0.633	0.126	0.118	43.1			NA			253	<4.00	NA	7.2
	8/10/2022	NA	68.3	0.737	<0.0391	0.212	40.9			NA			278	<4.00	NA	7.2
	8/18/2022	NA	77.7	0.752	0.0696 J	0.154	39.4			NA			262	<4.00	NA	7.0
	8/24/2022	NA	92.0	0.739	<0.100	<0.100	40.8			NA			273	<4.00	NA	7.2
	8/31/2022	NA	85.9	0.628	<0.0391	<0.0293	36.7			NA			277	<4.00	NA	7.4
	9/15/2022	NA	86.4	1.03	0.0909 J	0.206	33.4			NA			277	<4.00	NA	7.0
	9/22/2022	NA	95.8	0.585	0.518	<0.0293	38.4			NA			280	<4.00	NA	7.3
	9/28/2022	NA	91.2	0.702	<0.0391	<0.0293	32.8			NA			285	<4.00	NA	7.3
	10/4/2022	NA	75.6	0.803	0.376	0.201	33.7			NA			272	<4.00	NA	7.2
	10/14/2022	NA	81.0	0.807	0.360	0.195	33.1			NA			266	<4.00	NA	7.3
	10/19/2022	NA	136	<0.100	<0.0391	<0.0293	19.2			NA			283	<4.00	NA	7.4
	10/27/2022	NA	80.4	0.750	0.0601 J	0.423	29.8			NA			277	<4.00	NA	7.4
	11/2/2022	NA	80.0	0.681	0.120	0.154	29.8			NA			252	<4.00	NA	7.2
	11/9/2022	NA	81.1	0.746	0.141	0.117	32.5			NA			294	<4.00	NA	7.4
	11/16/2022	NA	82.2	0.738	0.120	0.384	30.9			NA			282	<4.00	NA	7.3
	11/30/2022	NA	88.1	0.602	0.140	0.141	45.4			NA			300	<4.00	NA	7.3
	12/9/2022	NA	83.7	0.809	0.0610 J	0.247	44.2			NA			309	<4.00	NA	7.5
	12/15/2022	NA	82.1	0.786	<0.0391	0.121	44.3			NA			348	<4.00	NA	7.2
	12/21/2022	NA	84.4	0.676	0.0802 J	<0.0293	43.6			NA			377	<4.00	NA	7.3
	12/29/2022	NA	77.3	0.555	0.211	0.310	33.4			NA			409	<4.00	NA	7.1
	1/4/2023	NA	75.9	0.863	0.0857 J	<0.0293	39.7			NA			354	<4.00	NA	7.4
	1/13/2023	NA	76.2	0.600	0.208	0.266	41.1			NA			357	<4.00	NA	7.2
	1/19/2023	NA	82.6	0.624	<0.0391	<0.0293	49.2			NA			340	<4.00	NA	7.1
	1/25/2023	NA	73.7	0.631	0.0564 J	0.149	47.7			NA			363	<4.00	NA	7.4
	2/2/2023	NA	75.4	0.670	0.223	0.196	47.2			NA			329	<4.00	NA	7.1
	2/8/2023	NA	84.5	0.607	0.0542 J	0.133	54.7			NA			360	<4.00	NA	7.2
	2/17/2023	NA	102	0.763	<0.0391	<0.0293	65.2			NA			432	<4.00	NA	7.5
	2/22/2023	NA	87.3	0.528	<0.0391	<0.0293	55.6			NA			418	<4.00	NA	7.1
	3/3/2023	NA	70.8	0.703	0.0671 J	0.0580 J	47.8			NA			310	<4.00	NA	7.2
	3/8/2023	NA	94.9	0.471 J	0.0666 J	<0.0293	55.9			NA			397	<4.00	NA	7.0
	3/15/2023	NA	93.9	0.636	<0.0391	<0.0293	51.0			NA			412	<4.00	NA	7.1
	3/23/2023	NA	92.9	0.485 J	0.0908 J	<0.0293	50.9			NA			398	<4.00	NA	7.1
	3/29/2023	NA	91.6	0.619	<0.0391	0.293	46.7			NA			474	<4.00	NA	7.1
	4/6/2023	NA	99.3	0.262 J	0.0504 J	<0.0293	55.6			NA			443	<4.00	NA	7.2
	4/14/2023	NA	87.6	0.748	0.0530 J	<0.0293	44.5			NA			555	<4.00	NA	7.4
	4/26/2023	NA	95.7	0.537	0.0898 J	0.439	53.1			NA			539	<4.00	NA	7.2
	5/2/2023	NA	95.2	0.966	0.406	<0.0293	51.8			NA			548	<4.00	NA	7.1
	5/11/2023	NA	104	0.676	0.174	1.59	59.7			NA			580	<4.00	NA	7.2
	5/15/2023	NA	97.6	0.859	<0.0391	0.998	53.6			NA			579	<4.00	NA	7.0
	5/25/2023	NA	86.5	0.585	0.0886 J	0.882	31.7			NA			687	<4.00	NA	7.0
	5/30/2023	NA	84.8	<0.100	0.432	1.32	57.2			NA			692	<4.00	NA	7.0
	6/9/2023	NA	96.5	0.291 J	0.149	0.158	21.0			NA			823	<4.00	NA	7.0
	6/15/2023	NA	97.7	0.451 J	0.0846 J	0.491	43.0			NA			667	<4.00	NA	6.9
	6/23/2023	NA	98.2	0.469 J	0.0975 J	0.178	34.8			NA			754	<4.00	NA	7.3
	6/26/2023	NA	94.3	0.347 J	0.0804 J	2.38	35.8			NA			738	<4.00	NA	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-2	3/31/2022	NA	150	<0.100	<0.0391	1.65	106			NA			1,340	<4.00	NA	6.3
	4/6/2022	NA	130	0.175 J	0.619	1.60	111			NA			1,360	<4.00	NA	6.2
	4/13/2022	NA	135	0.271 J	0.589	1.67	108			NA			1,380	<4.00	NA	6.5
	4/20/2022	NA	198	0.174 J	0.966	0.722	121			NA			1,330	<4.00	NA	6.4
	4/28/2022	NA	156	0.172 J	0.711	0.434	118			NA			1,380	<4.00	NA	6.4
	5/5/2022	NA	116	0.229 J	0.586	11.5	112			NA			1,330	<4.00	NA	6.3
	5/10/2022	NA	134	0.230 J	0.548	1.83	120			NA			1,320	<4.00	NA	6.3
	5/19/2022	NA	133	0.116 J	<0.0391	0.373	118			NA			1,380	<4.00	NA	6.2
	5/26/2022	NA	107	0.196 J	0.392	1.14	104			NA			1,320	<4.00	NA	6.0
	6/1/2022	NA	130	0.107 J	0.481	1.47	116			NA			1,340	<4.00	NA	6.3
	6/9/2022	NA	103	<0.100	0.330	0.236	103			NA			1,320	<4.00	NA	6.2
	6/17/2022	NA	99.0	0.213 J	0.395	0.702	102			NA			1,290	<4.00	NA	6.4
	6/23/2022	NA	109	<0.100	0.494	5.21	107			NA			1,270	<4.00	NA	6.3
	6/29/2022	NA	82.6	0.111 J	0.351	0.827	89.7			NA			1,330	<4.00	NA	6.2
	7/7/2022	NA	107	0.141 J	0.399	0.440	98.3			NA			1,300	<4.00	NA	6.4
	7/13/2022	NA	95.3	0.262 J	0.306	1.23	100			NA			1,280	<4.00	NA	6.2
	7/20/2022	NA	134	<0.100	0.485	1.46	122			NA			1,360	<4.00	NA	6.3
	7/27/2022	NA	101	<0.100	0.403	3.86	105			NA			1,340	<4.00	NA	6.4
	8/4/2022	NA	107	0.112 J	0.451	0.477	99.9			NA			1,250	<4.00	NA	6.2
	8/10/2022	NA	89.4	0.189 J	0.189	0.210	97.2			NA			1,260	<4.00	NA	6.3
	8/18/2022	NA	99.1	0.122 J	0.333	0.303	100			NA			1,280	<4.00	NA	6.3
	8/24/2022	NA	110	0.172 J	0.282	0.427	103			NA			1,290	<4.00	NA	6.3
	8/31/2022	NA	94.8	<0.100	0.175	0.238	94.4			NA			1,280	<4.00	NA	6.3
	9/15/2022	NA	94.4	0.538	0.232	2.31	98.7			NA			1,320	<4.00	NA	6.3
	9/22/2022	NA	94.4	0.260 J	0.650	0.481	105			NA			1,320	<4.00	NA	6.3
	9/28/2022	NA	91.2	0.498 J	0.261	<0.0293	92.5			NA			1,280	<4.00	NA	6.3
	10/4/2022	NA	88.9	0.143 J	0.497	0.189	97.0			NA			1,320	<4.00	NA	6.2
	10/14/2022	NA	82.6	0.101 J	<0.0391	0.0760 J	84.6			NA			1,320	<4.00	NA	6.2
	10/19/2022	NA	51.2	<0.100	0.101	<0.0293	48.5			NA			1,290	<4.00	NA	6.5
	10/27/2022	NA	124	0.165 J	0.319	0.871	104			NA			1,340	<4.00	NA	6.3
	11/2/2022	NA	91.1	0.148 J	0.221	0.947	92.9			NA			1,330	<4.00	NA	6.2
	11/9/2022	NA	97.8	0.161 J	0.273	0.366	101			NA			1,430	<4.00	NA	6.4
	11/16/2022	NA	86.0	0.180 J	0.206	0.579	91.4			NA			1,300	<4.00	NA	6.6
	11/30/2022	NA	90.4	0.133 J	0.264	0.168	91.1			NA			1,300	<4.00	NA	6.4
	12/9/2022	NA	78.0	0.158 J	0.217	0.785	82.5			NA			1,290	<4.00	NA	6.4
	12/15/2022	NA	100	0.120 J	0.331	1.64	91.2			NA			1,140	<4.00	NA	6.2
	12/21/2022	NA	94.8	0.212 J	0.252	1.16	99.5			NA			1,270	<4.00	NA	6.3
	12/29/2022	NA	124	0.114 J	0.527	0.338	95.6			NA			1,250	<4.00	NA	6.5
	1/4/2023	NA	92.6	0.126 J	0.318	1.23	88.2			NA			1,140	<4.00	NA	6.4
	1/13/2023	NA	72.6	0.112 J	0.227	0.381	81.1			NA			1,210	<4.00	NA	6.4
	1/19/2023	NA	96.5	0.135 J	0.185	0.320	96.7			NA			1,270	<4.00	NA	6.2
	1/25/2023	NA	83.2	0.133 J	0.128	0.416	87.9			NA			1,110	<4.00	NA	6.5
	2/2/2023	NA	80.8	<0.100	0.273	0.334	84.7			NA			1,180	<4.00	NA	6.2
	2/8/2023	NA	89.2	<0.100	0.180	0.392	92.3			NA			1,300	<4.00	NA	6.3
	2/17/2023	NA	89.9	0.226 J	0.194	0.178	96.2			NA			1,300	<4.00	NA	6.4
	2/22/2023	NA	98.9	0.113 J	0.606	0.162	70.9			NA			1,310	<4.00	NA	6.1
	3/3/2023	NA	130	<0.100	0.450	0.204	95.4			NA			1,200	<4.00	NA	6.2
	3/8/2023	NA	86.9	<0.100	0.139	0.239	94.5			NA			1,230	<4.00	NA	6.3
	3/15/2023	NA	89.8	<0.100	0.190	0.389	95.7			NA			1,190	<4.00	NA	6.2
	3/23/2023	NA	74.9	0.138 J	0.107	0.208	88.5			NA			1,250	<4.00	NA	6.3
	3/29/2023	NA	81.8	<0.100	0.150	0.975	90.9			NA			1,250	<4.00	NA	6.2
	4/6/2023	NA	83.9	<0.100	0.112	<0.0293	91.2			NA			1,300	<4.00	NA	6.5
	4/14/2023	NA	154	0.533	0.577	<0.0293	99.0			NA			1,380	<4.00	NA	6.8
	4/26/2023	NA	78.7	<0.100	0.194	1.49	89.3			NA			1,320	<4.00	NA	6.4
	5/2/2023	NA	78.4	<0.100	0.508	0.464	94.5			NA			1,310	<4.00	NA	6.3
	5/11/2023	NA	90.3	0.159 J	1.62	0.427	92.1			NA			1,280	<4.00	NA	6.4
	5/15/2023	NA	77.7	<0.100	0.886	0.245	86.7			NA			1,210	<4.00	NA	6.3
	5/25/2023	NA	74.3	0.113 J	0.166	1.47	81.9			NA			1,330	<4.00	NA	6.3
	5/30/2023	NA	77.2	<0.100	0.551	0.721	92.1			NA			1,340	<4.00	NA	6.3
	6/9/2023	NA	73.4	0.129 J	0.245	0.720	87.1			NA			1,310	<4.00	NA	6.4
	6/15/2023	NA	78.0	0.172 J	0.197	1.01	89.6			NA			1,310	<4.00	NA	6.4
	6/23/2023	NA	99.1	0.463 J	0.110	0.318	38.7			NA			788	<4.00	NA	7.4
	6/26/2023	NA	76.0	<0.100	0.162	6.73	90.5			NA			1,340	<4.00	NA	6.4

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



TABLE 3 GROUNDWATER SAMPLING (Additional Parameters) ANALYTICAL DATA SUMMARY South Hobbs GISA 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 ORO	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	1/4/2023	<0.495	28.1	<0.923	<0.923	<0.891	<0.923	15.9
	1/13/2023	<0.495	45.0	<0.935	<0.935	<0.902	<0.935	13.8
	1/19/2023	0.800 J	53.9	<0.918	<0.918	<0.886	<0.918	16.0
	1/25/2023	<0.495	28.9	<1.00	<1.00	<0.966	<1.00	19.5
	2/2/2023	<0.495	52.2	<0.978	<0.978	<0.944	<0.978	18.6
	2/8/2023	<0.495	45.3	<0.969	<0.969	<0.935	<0.969	16.9
	2/17/2023	<0.495	27.2	<0.938	<0.938	<0.905	<0.938	20.0
	2/22/2023	<0.495	66.3	<0.906	<0.906	<0.875	<0.906	18.7
	3/3/2023	<0.495	39.0	<0.893	<0.893	<0.862	<0.893	17.5
	3/8/2023	<0.495	79.3	<1.01	<1.01	<0.976	<1.01	18.6
	3/15/2023	<0.495	65.4	1.34 J	<1.01	<0.976	1.34 J	14.1
	3/23/2023	<0.495	63.2	<0.938	<0.938	<0.905	<0.938	18.2
	3/29/2023	<0.495	75.1	<0.947	<0.947	<0.914	<0.947	15.9
	4/6/2023	<0.495	55.8	<0.920	<0.920	<0.888	<0.920	15.8
	4/14/2023	<0.495	44.1	<0.909	<0.909	<0.877	<0.909	18.8
	4/26/2023	<0.495	67.9	<0.981	<0.981	<0.947	<0.981	19.8
	5/2/2023	<0.495	86.9	<0.935	<0.935	<0.902	<0.935	18.2
	5/11/2023	<0.495	73.0	<0.912	<0.912	<0.880	<0.912	18.1
	5/15/2023	<0.495	116	<0.920	<0.920	<0.888	<0.920	16.4
	5/25/2023	<0.495	137	<0.935	<0.935	<0.902	<0.935	17.6
	5/30/2023	<0.495	693	<0.944	<0.944	<0.911	<0.944	18.4
	6/9/2023	<0.495	165	<0.941	2.21 J	<0.908	2.21 J	19.1
	6/15/2023	<0.495	168	<0.935	<0.935	<0.902	<0.935	20.2
	6/23/2023	<0.495	75.4	<0.991	<0.991	<0.957	<0.991	20.2
	6/26/2023	<0.495	186	<0.920	<0.920	<0.888	<0.920	20.3



TABLE 3 GROUNDWATER SAMPLING (Additional Parameters) ANALYTICAL DATA SUMMARY South Hobbs GISA 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 ORO	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	1/4/2023	<0.495	910	1.66 J	<0.988	<0.954	1.66 J	16.8
	1/13/2023	<0.495	966	1.43 J	<0.941	<0.908	1.43 J	13.6
	1/19/2023	<0.495	1,610	1.06 J	<0.929	<0.897	1.06 J	16.3
	1/25/2023	<0.495	704	<0.923	<0.923	<0.891	<0.923	19.3
	2/2/2023	<0.495	1,480	1.01 J	<0.959	<0.926	1.01 J	18.7
	2/8/2023	<0.495	1,300	0.984 J	<0.898	<0.867	0.984 J	16.7
	2/17/2023	<0.495	1,040	1.24 J	<0.953	<0.920	1.24 J	20.0
	2/22/2023	<0.495	2,070	1.97 J	<0.926	<0.894	1.97 J	18.7
	3/3/2023	<0.495	1,520	2.46 J	<0.991	<0.957	2.46 J	18.1
	3/8/2023	<0.495	1,560	1.18 J	<1.01	<0.976	1.18 J	19.1
	3/15/2023	<0.495	1,500	<1.01	<1.01	<0.976	<1.01	14.2
	3/23/2023	<0.495	1,260	<0.920	<0.920	<0.888	<0.920	17.3
	3/29/2023	<0.495	1,580	<0.920	<0.929	<0.897	<0.929	16.6
	4/6/2023	<0.495	821	1.04 J	<0.988	<0.954	1.04 J	15.5
	4/14/2023	<0.495	438	1.22 J	<0.895	<0.864	1.22 J	18.8
	4/26/2023	<0.495	1,050	1.03 J	<0.935	<0.902	1.03 J	20.2
	5/2/2023	<0.495	1,310	1.19 J	<0.981	<0.947	1.19 J	18.5
	5/11/2023	<0.495	1,020	1.29 J	<0.909	<0.877	1.29 J	18.1
	5/15/2023	<0.495	1,210	<0.906	<0.906	<0.875	<0.906	16.3
	5/25/2023	<0.495	1,330	1.09 J	<0.947	<0.914	1.09 J	18.0
	5/30/2023	<0.495	267	<0.935	<0.935	<0.902	<0.935	18.3
	6/9/2023	<0.495	1,050	1.82 J	12.8	2.28 J	16.9	18.6
	6/15/2023	<0.495	1,050	1.50 J	<0.904	<0.872	1.50 J	20.4
	6/23/2023	<0.495	62.6	1.47 J	<0.935	<0.902	1.47 J	21.0
	6/26/2023	<0.495	1,070	<0.929	<0.929	<0.897	<0.929	20.6

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	6/9/2023	1200	2,050	106	<77.6	<62.2	<41.3	<103	<68.9	<81.0	<79.3	1,640	355	<98.2	<112	<98.9	1,840	101,000	<98.3	<69.4	<511	<369	<512	<81.9	<330	16,300	<85.1	170	<59.0	1,190	<109	<107	1,440	618	<70.4	3,050	1,480	171,000
	6/15/2023	1227	<297	<63.9	<77.6	309	<41.3	<103	102,000	<81.0	<79.3	1,590	<86.7	<98.2	<112	<98.9	98,200	2,210,000	<98.3	92.4	<511	<369	<512	<1,640	<330	10,100	<1,700	<2,720	<59.0	<3,770	<109	<107	<98.2	<98.2	<70.4	<3,470	<1,730	1,480,000
	6/23/2023	1139	<1,490	<319	<388	420	44,200	<515	98,100	<405	<396	<2,360	533	<491	<562	<495	89,200	1,610,000	<492	<347	<2,560	<1,840	<2,560	<409	<1,650	14,800	<425	<679	<295	<942	<544	<536	<491	<352	1,290	598	2,430,000	
	6/26/2023	0850	<2.97	2.56	<0.776	19.8	<413	<1.03	3,750	<0.810	<0.793	392	22.6	9.77	<1.12	<0.989	4,830	39,100	6.10	<0.694	<5.11	149	<5.12	<0.819	<3.30	24.8	<0.851	34.1	<0.590	17.9	<1.09	<1.07	18.8	12.2	<0.704	41.6	30.1	146,000
		0851	Initiate Vacuum Recovery Event																																			
		1003	<2.97	3.80	<0.776	22.8	<413	<1.03	365	<0.810	<0.793	145	7.20	4.36	1.31	2.68	528	3,090	2.00	1.89	<5.11	36.3	<5.12	<0.819	<3.30	40.8	1.06	21.9	<0.590	12.4	<1.09	<1.07	10.9	6.23	<0.704	12.6	9.97	16,900
		1108	<2.97	2.35	<0.776	16.7	4.21	<1.03	319	<0.810	<0.793	77.9	8.06	7.26	1.36	2.61	375	2,520	2.87	<0.694	<5.11	37.2	<5.12	<0.819	<3.30	26.1	1.27	30.6	<0.590	5.57	<1.09	<1.07	25.1	10.6	<0.704	15.9	13.2	15,900
	1208	Vacuum Recovery Event Terminated																																				
		<2.97	2.25	1.33	68.8	8.90	<1.03	1,030	<0.810	<0.793	200	9.93	6.18	1.19	2.49	1,420	8,570	2.77	1.69	<5.11	109	<5.12	<0.819	<3.30	150	1.27	27.7	<0.590	16.1	<1.09	<1.07	19.8	9.13	<0.704	16.2	12.4	41,700	

NOTES:
ug/m3 - micrograms per cubic meter of air



APPENDIX C

Laboratory Data Sheets and Chain-of-Custody Documentation



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/19/2023 11:13:45 AM

JOB DESCRIPTION

Levey Well Hobbs, NM - 03B1417001
SDG NUMBER Hobbs NM

JOB NUMBER

880-29353-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/19/2023 11:13:45 AM

Authorized for release by
Jessica Kramer, Project Manager
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(432)704-5440

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

Laboratory Job ID: 880-29353-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-29353-1
SDG: Hobbs NM

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.

HPLC/IC

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

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 880-29353-1
SDG: Hobbs NM

Job ID: 880-29353-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-29353-1**

Receipt

The sample was received on 6/9/2023 3:49 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 4.3°C

GC/MS VOA

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

HPLC/IC

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-107354 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFMS: Reanalysis of the following sample was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis : Levey Well (880-29353-1).

Method 300_ORGFMS: The instrument blank/CCB for analytical batch 860-107355 contained Nitrite as N greater than the method detection limit (MDL), and were not reanalyzed because none of the samples associated with this instrument blank/CCB contained the target compound. The data have been qualified and reported.

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 Sodium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-107263 and analytical batch 860-107471 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

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

General Chemistry

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

Client Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-29353-1

Date Collected: 06/09/23 10:00

Matrix: Water

Date Received: 06/09/23 15:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00327		0.00100	0.000460	mg/L		06/13/23 16:01	1
Bromobenzene	<0.000665	U	0.00100	0.000665	mg/L		06/13/23 16:01	1
Bromochloromethane	<0.000657	U	0.00100	0.000657	mg/L		06/13/23 16:01	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552	mg/L		06/13/23 16:01	1
Bromoform	<0.000633	U	0.00500	0.000633	mg/L		06/13/23 16:01	1
Bromomethane	<0.00142	U	0.00500	0.00142	mg/L		06/13/23 16:01	1
2-Butanone	<0.00828	U	0.0500	0.00828	mg/L		06/13/23 16:01	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896	mg/L		06/13/23 16:01	1
Chlorobenzene	<0.000530	U	0.00100	0.000530	mg/L		06/13/23 16:01	1
Chloroethane	<0.00198	U	0.0100	0.00198	mg/L		06/13/23 16:01	1
Chloroform	<0.000643	U	0.00100	0.000643	mg/L		06/13/23 16:01	1
Chloromethane	<0.00204	U	0.0100	0.00204	mg/L		06/13/23 16:01	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118	mg/L		06/13/23 16:01	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472	mg/L		06/13/23 16:01	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714	mg/L		06/13/23 16:01	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107	mg/L		06/13/23 16:01	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547	mg/L		06/13/23 16:01	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127	mg/L		06/13/23 16:01	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999	mg/L		06/13/23 16:01	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509	mg/L		06/13/23 16:01	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		06/13/23 16:01	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513	mg/L		06/13/23 16:01	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919	mg/L		06/13/23 16:01	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635	mg/L		06/13/23 16:01	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590	mg/L		06/13/23 16:01	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738	mg/L		06/13/23 16:01	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667	mg/L		06/13/23 16:01	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514	mg/L		06/13/23 16:01	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780	mg/L		06/13/23 16:01	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160	mg/L		06/13/23 16:01	1
Ethylbenzene	0.0129		0.00100	0.000411	mg/L		06/13/23 16:01	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126	mg/L		06/13/23 16:01	1
Isopropylbenzene	0.00611		0.00100	0.000613	mg/L		06/13/23 16:01	1
Methylene Chloride	<0.00173	U	0.00500	0.00173	mg/L		06/13/23 16:01	1
m,p-Xylenes	0.0529		0.0100	0.00124	mg/L		06/13/23 16:01	1
MTBE	<0.00139	U	0.00500	0.00139	mg/L		06/13/23 16:01	1
Naphthalene	<0.00135	U	0.0100	0.00135	mg/L		06/13/23 16:01	1
n-Butylbenzene	0.000774	J	0.00100	0.000644	mg/L		06/13/23 16:01	1
N-Propylbenzene	0.00323		0.00100	0.000498	mg/L		06/13/23 16:01	1
o-Xylene	0.00821		0.00100	0.000551	mg/L		06/13/23 16:01	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919	mg/L		06/13/23 16:01	1
sec-Butylbenzene	0.00137		0.00100	0.000468	mg/L		06/13/23 16:01	1
Styrene	<0.000655	U	0.00100	0.000655	mg/L		06/13/23 16:01	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442	mg/L		06/13/23 16:01	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644	mg/L		06/13/23 16:01	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470	mg/L		06/13/23 16:01	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801	mg/L		06/13/23 16:01	1
Toluene	0.0264		0.00100	0.000475	mg/L		06/13/23 16:01	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945	mg/L		06/13/23 16:01	1

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Client Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-29353-1

Date Collected: 06/09/23 10:00

Matrix: Water

Date Received: 06/09/23 15:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 16:01	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/13/23 16:01	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/13/23 16:01	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/13/23 16:01	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/13/23 16:01	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/13/23 16:01	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/13/23 16:01	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/13/23 16:01	1
1,2,4-Trimethylbenzene	0.0140		0.00100	0.000417 mg/L			06/13/23 16:01	1
1,3,5-Trimethylbenzene	0.00411		0.00100	0.000456 mg/L			06/13/23 16:01	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/13/23 16:01	1
Xylenes, Total	0.0611		0.0100	0.00124 mg/L			06/13/23 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		74 - 124		06/13/23 16:01	1
Dibromofluoromethane (Surr)	97		75 - 131		06/13/23 16:01	1
1,2-Dichloroethane-d4 (Surr)	92		63 - 144		06/13/23 16:01	1
Toluene-d8 (Surr)	104		80 - 120		06/13/23 16:01	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.482	J	0.500	0.0711 mg/L			06/13/23 10:43	1
Nitrate as N	0.180	H	0.100	0.0391 mg/L			06/13/23 10:43	1
Chloride	225		0.500	0.250 mg/L			06/13/23 10:43	1
Nitrite as N	<0.0293	U H	0.100	0.0293 mg/L			06/13/23 10:43	1
Fluoride	0.451	J	0.500	0.100 mg/L			06/13/23 10:43	1
Sulfate	49.6		0.500	0.200 mg/L			06/13/23 10:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	224		10.0	5.76 mg/L		06/12/23 10:00	06/12/23 18:30	50
Magnesium	43.7		0.200	0.0428 mg/L		06/12/23 10:00	06/12/23 18:17	1
Potassium	3.21		0.500	0.0914 mg/L		06/12/23 10:00	06/12/23 18:17	1
Sodium	73.8		0.500	0.152 mg/L		06/12/23 10:00	06/12/23 18:17	1
SiO2	62.3		1.07	0.471 mg/L		06/12/23 10:00	06/12/23 18:17	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	-13.4			%			06/13/23 08:37	1
Alkalinity (SM 2320B)	710		4.00	4.00 mg/L			06/14/23 14:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	710		4.00	4.00 mg/L			06/14/23 14:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/14/23 14:55	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/14/23 14:55	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/14/23 14:55	1
Total Dissolved Solids (SM 2540C)	1360		10.0	10.0 mg/L			06/10/23 17:58	1
pH (SM 4500 H+ B)	6.7	HF		SU			06/13/23 16:20	1
Temperature (SM 4500 H+ B)	20.0	HF		Degrees C			06/13/23 16:20	1

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Surrogate Summary

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

Job ID: 880-29353-1
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)	(80-120)
880-29353-1	Levey Well	105	97	92	104
880-29353-1 MS	Levey Well	98	97	90	97
LCS 860-107490/1010	Lab Control Sample	100	97	93	98
LCSD 860-107490/11	Lab Control Sample Dup	99	98	88	98
MB 860-107490/16	Method Blank	106	100	96	104
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: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-107490/16

Matrix: Water

Analysis Batch: 107490

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/13/23 15:04	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/13/23 15:04	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/13/23 15:04	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/13/23 15:04	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/13/23 15:04	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/13/23 15:04	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/13/23 15:04	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/13/23 15:04	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/13/23 15:04	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/13/23 15:04	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/13/23 15:04	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/13/23 15:04	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/13/23 15:04	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/13/23 15:04	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/13/23 15:04	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/13/23 15:04	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/13/23 15:04	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:04	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/13/23 15:04	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/13/23 15:04	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:04	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:04	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/13/23 15:04	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/13/23 15:04	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/13/23 15:04	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/13/23 15:04	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/13/23 15:04	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/13/23 15:04	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/13/23 15:04	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/13/23 15:04	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/13/23 15:04	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/13/23 15:04	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/13/23 15:04	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/13/23 15:04	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/13/23 15:04	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/13/23 15:04	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/13/23 15:04	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/13/23 15:04	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/13/23 15:04	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/13/23 15:04	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/13/23 15:04	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/13/23 15:04	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/13/23 15:04	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/13/23 15:04	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/13/23 15:04	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/13/23 15:04	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/13/23 15:04	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/13/23 15:04	1

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-107490/16

Matrix: Water

Analysis Batch: 107490

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			06/13/23 15:04	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:04	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/13/23 15:04	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/13/23 15:04	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/13/23 15:04	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/13/23 15:04	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/13/23 15:04	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/13/23 15:04	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/13/23 15:04	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/13/23 15:04	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/13/23 15:04	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/13/23 15:04	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/13/23 15:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		74 - 124		06/13/23 15:04	1
Dibromofluoromethane (Surr)	100		75 - 131		06/13/23 15:04	1
1,2-Dichloroethane-d4 (Surr)	96		63 - 144		06/13/23 15:04	1
Toluene-d8 (Surr)	104		80 - 120		06/13/23 15:04	1

Lab Sample ID: LCS 860-107490/1010

Matrix: Water

Analysis Batch: 107490

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	0.05004		mg/L		100	75 - 125
Bromobenzene	0.0500	0.04849		mg/L		97	75 - 125
Bromochloromethane	0.0500	0.04896		mg/L		98	60 - 140
Bromodichloromethane	0.0500	0.05071		mg/L		101	75 - 125
Bromoform	0.0500	0.04438		mg/L		89	70 - 130
Bromomethane	0.0500	0.04913		mg/L		98	60 - 140
2-Butanone	0.250	0.2304		mg/L		92	60 - 140
Carbon tetrachloride	0.0500	0.04175		mg/L		83	70 - 130
Chlorobenzene	0.0500	0.04800		mg/L		96	65 - 135
Chloroethane	0.0500	0.03946		mg/L		79	60 - 140
Chloroform	0.0500	0.04803		mg/L		96	70 - 121
Chloromethane	0.0500	0.04628		mg/L		93	60 - 140
2-Chlorotoluene	0.0500	0.04849		mg/L		97	73 - 125
4-Chlorotoluene	0.0500	0.04830		mg/L		97	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04616		mg/L		92	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05150		mg/L		103	74 - 125
Dibromochloromethane	0.0500	0.05184		mg/L		104	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05381		mg/L		108	59 - 125
1,2-Dibromoethane	0.0500	0.04915		mg/L		98	73 - 125
1,2-Dichlorobenzene	0.0500	0.04877		mg/L		98	75 - 125
1,3-Dichlorobenzene	0.0500	0.04858		mg/L		97	75 - 125
1,4-Dichlorobenzene	0.0500	0.04842		mg/L		97	75 - 125
Dichlorodifluoromethane	0.0500	0.04701		mg/L		94	50 - 150

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-107490/1010

Matrix: Water

Analysis Batch: 107490

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	0.05042		mg/L		101	70 - 130
1,2-Dichloroethane	0.0500	0.04434		mg/L		89	72 - 130
1,1-Dichloroethene	0.0500	0.04890		mg/L		98	50 - 150
1,2-Dichloropropane	0.0500	0.05128		mg/L		103	74 - 125
1,3-Dichloropropane	0.0500	0.04862		mg/L		97	75 - 125
2,2-Dichloropropane	0.0500	0.04646		mg/L		93	75 - 125
1,1-Dichloropropene	0.0500	0.04322		mg/L		86	75 - 125
Ethylbenzene	0.0500	0.04920		mg/L		98	75 - 125
Hexachlorobutadiene	0.0500	0.04864		mg/L		97	75 - 125
Isopropylbenzene	0.0500	0.04964		mg/L		99	75 - 125
Methylene Chloride	0.0500	0.04597		mg/L		92	71 - 125
m,p-Xylenes	0.0500	0.04900		mg/L		98	75 - 125
MTBE	0.0500	0.04917		mg/L		98	65 - 135
Naphthalene	0.0500	0.05018		mg/L		100	70 - 130
n-Butylbenzene	0.0500	0.04929		mg/L		99	75 - 125
N-Propylbenzene	0.0500	0.04952		mg/L		99	75 - 125
o-Xylene	0.0500	0.04933		mg/L		99	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05016		mg/L		100	75 - 125
sec-Butylbenzene	0.0500	0.04924		mg/L		98	75 - 125
Styrene	0.0500	0.05076		mg/L		102	75 - 125
tert-Butylbenzene	0.0500	0.04999		mg/L		100	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05020		mg/L		100	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05105		mg/L		102	74 - 125
Tetrachloroethene	0.0500	0.04931		mg/L		99	71 - 125
Toluene	0.0500	0.04815		mg/L		96	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04729		mg/L		95	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05052		mg/L		101	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04941		mg/L		99	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04862		mg/L		97	75 - 135
1,1,1-Trichloroethane	0.0500	0.04938		mg/L		99	70 - 130
1,1,2-Trichloroethane	0.0500	0.05076		mg/L		102	70 - 130
Trichloroethene	0.0500	0.04960		mg/L		99	75 - 135
Trichlorofluoromethane	0.0500	0.04866		mg/L		97	60 - 140
1,2,3-Trichloropropane	0.0500	0.05138		mg/L		103	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04938		mg/L		99	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04808		mg/L		96	60 - 140
Vinyl chloride	0.0500	0.05186		mg/L		104	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	97		75 - 131
1,2-Dichloroethane-d4 (Surr)	93		63 - 144
Toluene-d8 (Surr)	98		80 - 120

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-107490/11

Matrix: Water

Analysis Batch: 107490

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.05363		mg/L		107	75 - 125	7	25
Bromobenzene	0.0500	0.05148		mg/L		103	75 - 125	6	25
Bromochloromethane	0.0500	0.05367		mg/L		107	60 - 140	9	25
Bromodichloromethane	0.0500	0.05470		mg/L		109	75 - 125	8	25
Bromoform	0.0500	0.04877		mg/L		98	70 - 130	9	25
Bromomethane	0.0500	0.05393		mg/L		108	60 - 140	9	25
2-Butanone	0.250	0.2565		mg/L		103	60 - 140	11	25
Carbon tetrachloride	0.0500	0.04363		mg/L		87	70 - 130	4	25
Chlorobenzene	0.0500	0.05203		mg/L		104	65 - 135	8	25
Chloroethane	0.0500	0.03800		mg/L		76	60 - 140	4	25
Chloroform	0.0500	0.05152		mg/L		103	70 - 121	7	25
Chloromethane	0.0500	0.04778		mg/L		96	60 - 140	3	25
2-Chlorotoluene	0.0500	0.05218		mg/L		104	73 - 125	7	25
4-Chlorotoluene	0.0500	0.05153		mg/L		103	74 - 125	6	25
cis-1,2-Dichloroethene	0.0500	0.04938		mg/L		99	75 - 125	7	25
cis-1,3-Dichloropropene	0.0500	0.05459		mg/L		109	74 - 125	6	25
Dibromochloromethane	0.0500	0.05583		mg/L		112	73 - 125	7	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05823		mg/L		116	59 - 125	8	25
1,2-Dibromoethane	0.0500	0.05375		mg/L		107	73 - 125	9	25
1,2-Dichlorobenzene	0.0500	0.05216		mg/L		104	75 - 125	7	25
1,3-Dichlorobenzene	0.0500	0.05115		mg/L		102	75 - 125	5	25
1,4-Dichlorobenzene	0.0500	0.05188		mg/L		104	75 - 125	7	25
Dichlorodifluoromethane	0.0500	0.05011		mg/L		100	50 - 150	6	25
1,1-Dichloroethane	0.0500	0.05450		mg/L		109	70 - 130	8	25
1,2-Dichloroethane	0.0500	0.04962		mg/L		99	72 - 130	11	25
1,1-Dichloroethene	0.0500	0.05210		mg/L		104	50 - 150	6	25
1,2-Dichloropropane	0.0500	0.05557		mg/L		111	74 - 125	8	25
1,3-Dichloropropane	0.0500	0.05239		mg/L		105	75 - 125	7	25
2,2-Dichloropropane	0.0500	0.05391		mg/L		108	75 - 125	15	25
1,1-Dichloropropene	0.0500	0.04464		mg/L		89	75 - 125	3	25
Ethylbenzene	0.0500	0.05298		mg/L		106	75 - 125	7	25
Hexachlorobutadiene	0.0500	0.05117		mg/L		102	75 - 125	5	25
Isopropylbenzene	0.0500	0.05305		mg/L		106	75 - 125	7	25
Methylene Chloride	0.0500	0.04814		mg/L		96	71 - 125	5	25
m,p-Xylenes	0.0500	0.05240		mg/L		105	75 - 125	7	25
MTBE	0.0500	0.05742		mg/L		115	65 - 135	15	25
Naphthalene	0.0500	0.05614		mg/L		112	70 - 130	11	25
n-Butylbenzene	0.0500	0.05266		mg/L		105	75 - 125	7	25
N-Propylbenzene	0.0500	0.05260		mg/L		105	75 - 125	6	25
o-Xylene	0.0500	0.05245		mg/L		105	75 - 125	6	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05368		mg/L		107	75 - 125	7	25
sec-Butylbenzene	0.0500	0.05256		mg/L		105	75 - 125	7	25
Styrene	0.0500	0.05423		mg/L		108	75 - 125	7	25
tert-Butylbenzene	0.0500	0.05315		mg/L		106	75 - 125	6	25
1,1,1,2-Tetrachloroethane	0.0500	0.05416		mg/L		108	72 - 125	8	25
1,1,2,2-Tetrachloroethane	0.0500	0.05462		mg/L		109	74 - 125	7	25
Tetrachloroethene	0.0500	0.05382		mg/L		108	71 - 125	9	25
Toluene	0.0500	0.05191		mg/L		104	70 - 130	8	25

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-107490/11

Matrix: Water

Analysis Batch: 107490

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	0.05468		mg/L		109	75 - 125	14	25
trans-1,3-Dichloropropene	0.0500	0.05410		mg/L		108	66 - 125	7	25
1,2,3-Trichlorobenzene	0.0500	0.05482		mg/L		110	75 - 137	10	25
1,2,4-Trichlorobenzene	0.0500	0.05440		mg/L		109	75 - 135	11	25
1,1,1-Trichloroethane	0.0500	0.05329		mg/L		107	70 - 130	8	25
1,1,2-Trichloroethane	0.0500	0.05444		mg/L		109	70 - 130	7	25
Trichloroethene	0.0500	0.05217		mg/L		104	75 - 135	5	25
Trichlorofluoromethane	0.0500	0.05068		mg/L		101	60 - 140	4	25
1,2,3-Trichloropropane	0.0500	0.05487		mg/L		110	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.05172		mg/L		103	75 - 125	5	25
1,3,5-Trimethylbenzene	0.0500	0.05199		mg/L		104	60 - 140	8	25
Vinyl chloride	0.0500	0.05397		mg/L		108	60 - 140	4	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	88		63 - 144
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: 880-29353-1 MS

Matrix: Water

Analysis Batch: 107490

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
Benzene	0.00327		0.0500	0.05602		mg/L		105	66 - 142
Bromobenzene	<0.000665	U	0.0500	0.04861		mg/L		97	75 - 125
Bromochloromethane	<0.000657	U	0.0500	0.05431		mg/L		109	60 - 140
Bromodichloromethane	<0.000552	U	0.0500	0.05512		mg/L		110	75 - 125
Bromoform	<0.000633	U	0.0500	0.04761		mg/L		95	75 - 125
Bromomethane	<0.00142	U	0.0500	0.04668		mg/L		93	60 - 140
2-Butanone	<0.00828	U	0.250	0.2586		mg/L		103	60 - 140
Carbon tetrachloride	<0.000896	U	0.0500	0.04239		mg/L		85	62 - 125
Chlorobenzene	<0.000530	U	0.0500	0.05000		mg/L		100	60 - 133
Chloroethane	<0.00198	U	0.0500	0.04632		mg/L		93	60 - 140
Chloroform	<0.000643	U	0.0500	0.04854		mg/L		97	70 - 130
Chloromethane	<0.00204	U	0.0500	0.04838		mg/L		97	60 - 140
2-Chlorotoluene	<0.00118	U	0.0500	0.04950		mg/L		99	73 - 125
4-Chlorotoluene	<0.000472	U	0.0500	0.04725		mg/L		94	74 - 125
cis-1,2-Dichloroethene	<0.000714	U	0.0500	0.04781		mg/L		96	75 - 125
cis-1,3-Dichloropropene	<0.00107	U	0.0500	0.05527		mg/L		111	74 - 125
Dibromochloromethane	<0.000547	U	0.0500	0.05632		mg/L		113	73 - 125
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.0500	0.05634		mg/L		113	59 - 125
1,2-Dibromoethane	<0.000999	U	0.0500	0.05335		mg/L		107	73 - 125
1,2-Dichlorobenzene	<0.000509	U	0.0500	0.04934		mg/L		99	75 - 125
1,3-Dichlorobenzene	<0.000513	U	0.0500	0.04923		mg/L		98	75 - 125
1,4-Dichlorobenzene	<0.000513	U	0.0500	0.04840		mg/L		97	75 - 125
Dichlorodifluoromethane	<0.000919	U	0.0500	0.04539		mg/L		91	70 - 130
1,1-Dichloroethane	<0.000635	U	0.0500	0.05441		mg/L		109	72 - 125

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: 880-29353-1 MS

Matrix: Water

Analysis Batch: 107490

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
1,2-Dichloroethane	<0.000590	U	0.0500	0.04817		mg/L		96	68 - 127
1,1-Dichloroethene	<0.000738	U	0.0500	0.04833		mg/L		97	59 - 172
1,2-Dichloropropane	<0.000667	U	0.0500	0.05557		mg/L		111	74 - 125
1,3-Dichloropropane	<0.000514	U	0.0500	0.05204		mg/L		104	75 - 125
2,2-Dichloropropane	<0.000780	U	0.0500	0.05145		mg/L		103	75 - 125
1,1-Dichloropropene	<0.00160	U	0.0500	0.04330		mg/L		87	75 - 125
Ethylbenzene	0.0129		0.0500	0.06575		mg/L		106	75 - 125
Hexachlorobutadiene	<0.00126	U	0.0500	0.04968		mg/L		99	75 - 125
Isopropylbenzene	0.00611		0.0500	0.05798		mg/L		104	75 - 125
Methylene Chloride	<0.00173	U	0.0500	0.04625		mg/L		92	75 - 125
m,p-Xylenes	0.0529		0.0500	0.1097		mg/L		114	75 - 125
MTBE	<0.00139	U	0.0500	0.05367		mg/L		107	65 - 135
Naphthalene	<0.00135	U	0.0500	0.05399		mg/L		108	70 - 130
n-Butylbenzene	0.000774	J	0.0500	0.04991		mg/L		98	75 - 125
N-Propylbenzene	0.00323		0.0500	0.05129		mg/L		96	75 - 125
o-Xylene	0.00821		0.0500	0.06042		mg/L		104	75 - 125
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.0500	0.05027		mg/L		101	75 - 125
sec-Butylbenzene	0.00137		0.0500	0.04959		mg/L		96	75 - 125
Styrene	<0.000655	U	0.0500	0.05249		mg/L		105	75 - 125
tert-Butylbenzene	<0.000442	U	0.0500	0.04836		mg/L		97	75 - 125
1,1,1,2-Tetrachloroethane	<0.000644	U	0.0500	0.05343		mg/L		107	72 - 125
1,1,2,2-Tetrachloroethane	<0.000470	U	0.0500	0.05128		mg/L		103	74 - 125
Tetrachloroethene	<0.000801	U	0.0500	0.05118		mg/L		102	71 - 125
Toluene	0.0264		0.0500	0.07954		mg/L		106	59 - 139
trans-1,2-Dichloroethene	<0.000945	U	0.0500	0.05189		mg/L		104	75 - 125
trans-1,3-Dichloropropene	<0.00127	U	0.0500	0.05346		mg/L		107	66 - 125
1,2,3-Trichlorobenzene	<0.00217	U	0.0500	0.05253		mg/L		105	75 - 137
1,2,4-Trichlorobenzene	<0.00175	U	0.0500	0.05128		mg/L		103	75 - 135
1,1,1-Trichloroethane	<0.00169	U	0.0500	0.04941		mg/L		99	75 - 125
1,1,2-Trichloroethane	<0.000511	U	0.0500	0.05364		mg/L		107	75 - 127
Trichloroethene	<0.000791	U	0.0500	0.05028		mg/L		101	62 - 137
Trichlorofluoromethane	<0.000638	U	0.0500	0.04691		mg/L		94	60 - 140
1,2,3-Trichloropropane	<0.000490	U	0.0500	0.05290		mg/L		106	75 - 125
1,2,4-Trimethylbenzene	0.0140		0.0500	0.06249		mg/L		97	75 - 125
1,3,5-Trimethylbenzene	0.00411		0.0500	0.05146		mg/L		95	70 - 125
Vinyl chloride	<0.000638	U	0.0500	0.04091		mg/L		82	60 - 140
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		74 - 124						
Dibromofluoromethane (Surr)	97		75 - 131						
1,2-Dichloroethane-d4 (Surr)	90		63 - 144						
Toluene-d8 (Surr)	97		80 - 120						

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-107354/3

Matrix: Water

Analysis Batch: 107354

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			06/12/23 15:52	1
Chloride	<0.250	U	0.500	0.250 mg/L			06/12/23 15:52	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/12/23 15:52	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/12/23 15:52	1

Lab Sample ID: MB 860-107354/4

Matrix: Water

Analysis Batch: 107354

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			06/13/23 06:45	1
Chloride	<0.250	U	0.500	0.250 mg/L			06/13/23 06:45	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/13/23 06:45	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/13/23 06:45	1

Lab Sample ID: LCS 860-107354/4

Matrix: Water

Analysis Batch: 107354

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	9.881		mg/L		99	90 - 110
Chloride	10.0	9.996		mg/L		100	90 - 110
Fluoride	10.0	10.16		mg/L		102	90 - 110
Sulfate	10.0	10.39		mg/L		104	90 - 110

Lab Sample ID: LCS 860-107354/5

Matrix: Water

Analysis Batch: 107354

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	9.047		mg/L		90	90 - 110
Chloride	10.0	9.996		mg/L		100	90 - 110
Fluoride	10.0	10.24		mg/L		102	90 - 110
Sulfate	10.0	9.885		mg/L		99	90 - 110

Lab Sample ID: LCSD 860-107354/5

Matrix: Water

Analysis Batch: 107354

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	9.823		mg/L		98	90 - 110	1	20
Chloride	10.0	10.02		mg/L		100	90 - 110	0	20
Fluoride	10.0	10.22		mg/L		102	90 - 110	1	20
Sulfate	10.0	10.38		mg/L		104	90 - 110	0	20

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-107354/56

Matrix: Water

Analysis Batch: 107354

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	9.070		mg/L		91	90 - 110	0		20
Chloride	10.0	10.00		mg/L		100	90 - 110	0		20
Fluoride	10.0	10.27		mg/L		103	90 - 110	0		20
Sulfate	10.0	9.907		mg/L		99	90 - 110	0		20

Lab Sample ID: LLCS 860-107354/7

Matrix: Water

Analysis Batch: 107354

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Bromide	0.500	0.6491		mg/L		130	50 - 150			
Chloride	0.500	0.5956		mg/L		119	50 - 150			
Fluoride	0.500	0.5582		mg/L		112	50 - 150			
Sulfate	0.500	0.5413		mg/L		108	50 - 150			

Lab Sample ID: MB 860-107355/3

Matrix: Water

Analysis Batch: 107355

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed		Dil Fac
Nitrate as N	<0.0391	U	0.100	mg/L			06/12/23 15:52		1
Nitrite as N	<0.0293	U	0.100	mg/L			06/12/23 15:52		1

Lab Sample ID: MB 860-107355/54

Matrix: Water

Analysis Batch: 107355

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed		Dil Fac
Nitrate as N	<0.0391	U	0.100	mg/L			06/13/23 06:45		1
Nitrite as N	<0.0293	U	0.100	mg/L			06/13/23 06:45		1

Lab Sample ID: LCS 860-107355/4

Matrix: Water

Analysis Batch: 107355

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Nitrate as N	10.0	10.06		mg/L		101	80 - 120			
Nitrite as N	10.0	9.592		mg/L		96	80 - 120			

Lab Sample ID: LCS 860-107355/55

Matrix: Water

Analysis Batch: 107355

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Nitrate as N	10.0	10.03		mg/L		100	80 - 120			
Nitrite as N	10.0	9.618		mg/L		96	80 - 120			

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-107355/5

Matrix: Water

Analysis Batch: 107355

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	10.06		mg/L		101	80 - 120		0	20
Nitrite as N	10.0	9.655		mg/L		97	80 - 120		1	20

Lab Sample ID: LCSD 860-107355/56

Matrix: Water

Analysis Batch: 107355

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	10.03		mg/L		100	80 - 120		0	20
Nitrite as N	10.0	9.651		mg/L		97	80 - 120		0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-107263/1-A

Matrix: Water

Analysis Batch: 107471

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 107263

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed		Dil Fac
	Result	Qualifier							
Calcium	<0.115	U	0.200	0.115 mg/L		06/12/23 10:00	06/12/23 17:06		1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		06/12/23 10:00	06/12/23 17:06		1
Potassium	<0.0914	U	0.500	0.0914 mg/L		06/12/23 10:00	06/12/23 17:06		1
Sodium	<0.152	U	0.500	0.152 mg/L		06/12/23 10:00	06/12/23 17:06		1
SiO2	<0.471	U	1.07	0.471 mg/L		06/12/23 10:00	06/12/23 17:06		1

Lab Sample ID: LCS 860-107263/2-A

Matrix: Water

Analysis Batch: 107471

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 107263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Calcium	25.0	22.90		mg/L		92	85 - 115			
Magnesium	25.0	22.00		mg/L		88	85 - 115			
Potassium	10.0	8.880		mg/L		89	85 - 115			
Sodium	25.0	22.60		mg/L		90	85 - 115			
SiO2	21.4	19.88		mg/L		93	85 - 115			

Lab Sample ID: LCSD 860-107263/3-A

Matrix: Water

Analysis Batch: 107471

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 107263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
Calcium	25.0	23.90		mg/L		96	85 - 115		4	20
Magnesium	25.0	23.00		mg/L		92	85 - 115		4	20
Potassium	10.0	9.240		mg/L		92	85 - 115		4	20
Sodium	25.0	23.40		mg/L		94	85 - 115		3	20
SiO2	21.4	20.82		mg/L		97	85 - 115		5	20

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QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: LLCS 860-107263/4-A

Matrix: Water

Analysis Batch: 107471

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 107263

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits	
							50 - 150	50 - 150
Calcium	0.200	0.1950	J	mg/L		98		
Magnesium	0.200	0.1800	J	mg/L		90		
Potassium	0.500	0.4710	J	mg/L		94		
Sodium	0.500	0.6340		mg/L		127		
SiO2	1.07	1.081		mg/L		101		

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-107794/3

Matrix: Water

Analysis Batch: 107794

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			06/14/23 11:12	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/14/23 11:12	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/14/23 11:12	1
Hydroxide Alkalinity	<4.00	U	4.00	mg/L			06/14/23 11:12	1
Phenolphthalein Alkalinity	<4.00	U	4.00	mg/L			06/14/23 11:12	1

Lab Sample ID: LCS 860-107794/4

Matrix: Water

Analysis Batch: 107794

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
							85 - 115	
Alkalinity	250	255.7		mg/L		102		

Lab Sample ID: LCSD 860-107794/5

Matrix: Water

Analysis Batch: 107794

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Alkalinity			250	256.5		mg/L		103	85 - 115	0	20

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

Lab Sample ID: MB 860-107154/1

Matrix: Water

Analysis Batch: 107154

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Total Dissolved Solids	<5.00	U	5.00	mg/L			06/10/23 17:58	1

Lab Sample ID: LCS 860-107154/2

Matrix: Water

Analysis Batch: 107154

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
							80 - 120	
Total Dissolved Solids	1000	1005		mg/L		101		

Eurofins Midland

QC Sample Results

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

Job ID: 880-29353-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-107154/3				Client Sample ID: Lab Control Sample Dup							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 107154											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	1005		mg/L		101	80 - 120	0	10

Lab Sample ID: LLCS 860-107154/4				Client Sample ID: Lab Control Sample							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 107154											
Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			5.00	6.500		mg/L		130	50 - 150		

QC Association Summary

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

Job ID: 880-29353-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 107490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total/NA	Water	8260C	
MB 860-107490/16	Method Blank	Total/NA	Water	8260C	
LCS 860-107490/1010	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-107490/11	Lab Control Sample Dup	Total/NA	Water	8260C	
880-29353-1 MS	Levey Well	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 107354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total/NA	Water	300.0	
MB 860-107354/3	Method Blank	Total/NA	Water	300.0	
MB 860-107354/54	Method Blank	Total/NA	Water	300.0	
LCS 860-107354/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-107354/55	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-107354/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-107354/56	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-107354/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 107355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total/NA	Water	300.0	
MB 860-107355/3	Method Blank	Total/NA	Water	300.0	
MB 860-107355/54	Method Blank	Total/NA	Water	300.0	
LCS 860-107355/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-107355/55	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-107355/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-107355/56	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 107263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-107263/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-107263/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-107263/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-107263/4-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 107471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	107263
880-29353-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	107263
MB 860-107263/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	107263
LCS 860-107263/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	107263
LCSD 860-107263/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	107263
LLCS 860-107263/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	107263

Eurofins Midland

QC Association Summary

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

Job ID: 880-29353-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 107154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-107154/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-107154/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-107154/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LLCS 860-107154/4	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 107460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total/NA	Water	SM 1030E	

Analysis Batch: 107594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 107794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29353-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-107794/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-107794/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-107794/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Lab Chronicle

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

Job ID: 880-29353-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-29353-1
Date Collected: 06/09/23 10:00 Matrix: Water
Date Received: 06/09/23 15:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	107490	NA	EET HOU	06/13/23 16:01
Total/NA	Analysis	300.0		1	107354	WP	EET HOU	06/13/23 10:43
Total/NA	Analysis	300.0		1	107355	WP	EET HOU	06/13/23 10:43
Total Recoverable	Prep	200.7			107263	MD	EET HOU	06/12/23 10:00
Total Recoverable	Analysis	200.7 Rev 4.4		1	107471	JDM	EET HOU	06/12/23 18:17
Total Recoverable	Prep	200.7			107263	MD	EET HOU	06/12/23 10:00
Total Recoverable	Analysis	200.7 Rev 4.4		50	107471	JDM	EET HOU	06/12/23 18:30
Total/NA	Analysis	SM 1030E		1	107460	SC	EET HOU	06/13/23 08:37
Total/NA	Analysis	SM 2320B		1	107794	TL	EET HOU	06/14/23 14:55
Total/NA	Analysis	SM 2540C		1	107154	HN	EET HOU	06/10/23 17:58
Total/NA	Analysis	SM 4500 H+ B		1	107594	TL	EET HOU	06/13/23 16:20

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

Accreditation/Certification Summary

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

Job ID: 880-29353-1
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	T104704215-23-50	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
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: 880-29353-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	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
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: 880-29353-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-29353-1	Levey Well	Water	06/09/23 10:00	06/09/23 15:49

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



Chain of Custody

Work Order No. 19253

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
Phoenix AZ (480-335-0900) Atlanta GA (770-444-8800) Tampa FL (813-392-7550) Hobbs NM (575-392-7550)

Page 1 of 1

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

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:	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	Wait Ice	Yes	No
Temperature (°C)	4.0/4.3			Thermometer ID		
Received Inact.	(yes) No					
Cooler Custody Seals	Yes No			Correction Factor		
Sample Custody Seals	Yes No			Total Containers.		

[illegible]

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number	VOCs	Anions:	Cations	pH	Alkalinity	TDS	Sample Comments	
Levey Well	GW	6-9-23	1000	-	7	X	X	X	X	X	X	X	24hr	
 880-29353 Chain of Custody														

880-29353 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 Tl Sn I J 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 / 2451 / 7470 / 7474 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 		2/9/23	2		
3 		1549	4		
5			6		

Eurofins Midland

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

Chain of Custody Record



Environment Test ng

Client Information (Sub Contract Lab)				Carrier Tracking No(s): 880-7183-1	
Client Contact: Jessica, Kramer				State of Origin: New Mexico	
Shipping/Receiving: Jessica, Kramer@et.eurofinsus.com				Page: Page 1 of 1	
Company: Eurofins Environment Testing South Cent				Job #: 880-29353-1	
Address: 145 Greenbriar Dr				Preservation Codes: M Hexane N None O AsNaO2 P Na2O4S Q Na2SO3 R Na2SO4 S H2SO4 T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 Y Trizma Z other (specify)	
City: Stefford				Other: 	
State, Zip: TX, 77477				Total Number of Containers: 7	
Phone: 281-240-4200(Tel)				Special Instructions/Note: 	
Email: 				Special Instructions/Note: 	
Project Name: Levey Well Hobbs, NM 0381417001				Special Instructions/Note: 	
Site: 				Special Instructions/Note: 	
Sample Identification Client ID (Lab ID) 88000024				Special Instructions/Note: 	
Sample Date 6/9/23				Special Instructions/Note: 	
Sample Time 10:00				Special Instructions/Note: 	
Sample Type (C=Comp, G=grab) Mountain				Special Instructions/Note: 	
Matrix (Hexane, Seawater, or Tissue Acid) Water				Special Instructions/Note: 	
Field Filtered Sample (Yes or No) X				Special Instructions/Note: 	
Perform MS/MSD (Yes or No) X				Special Instructions/Note: 	
2500C/6030C (MOD) Full List VOCs X				Special Instructions/Note: 	
200 T/200 T, P TR (MOD) Custom List X				Special Instructions/Note: 	
300 GRGFM, 280/ Br Cl, F, SO4 X				Special Instructions/Note: 	
300 GRGFM/ NO2, NO3 X				Special Instructions/Note: 	
SM4500, H+ pH X				Special Instructions/Note: 	
2540C, Colloid TDS X				Special Instructions/Note: 	
2320B Alkalinity X				Special Instructions/Note: 	
Cation, Anion (MOD) Copy Analyte X				Special Instructions/Note: 	
Analysis Requested 				Special Instructions/Note: 	
Due Date Requested: 6/13/2023				Special Instructions/Note: 	
TAT Requested (days): 				Special Instructions/Note: 	
PO #: 				Special Instructions/Note: 	
WO #: 				Special Instructions/Note: 	
Project #: 88000024				Special Instructions/Note: 	
SSGW#: 				Special Instructions/Note: 	
Sample Date 6/9/23				Special Instructions/Note: 	
Sample Time 10:00				Special Instructions/Note: 	
Sample Type (C=Comp, G=grab) Mountain				Special Instructions/Note: 	
Matrix (Hexane, Seawater, or Tissue Acid) Water				Special Instructions/Note: 	
Field Filtered Sample (Yes or No) X				Special Instructions/Note: 	
Perform MS/MSD (Yes or No) X				Special Instructions/Note: 	
2500C/6030C (MOD) Full List VOCs X				Special Instructions/Note: 	
200 T/200 T, P TR (MOD) Custom List X				Special Instructions/Note: 	
300 GRGFM, 280/ Br Cl, F, SO4 X				Special Instructions/Note: 	
300 GRGFM/ NO2, NO3 X				Special Instructions/Note: 	
SM4500, H+ pH X				Special Instructions/Note: 	
2540C, Colloid TDS X				Special Instructions/Note: 	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29353-1

SDG Number: Hobbs NM

Login Number: 29353

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29353-1

SDG Number: Hobbs NM

Login Number: 29353

List Number: 2

Creator: Pena, Jesiel

List Source: Eurofins Houston

List Creation: 06/10/23 02:58 PM

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



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/21/2023 9:18:43 AM

JOB DESCRIPTION

Levey Well Hobbs, NM - 03B1417001
SDG NUMBER Hobbs NM

JOB NUMBER

880-29606-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/21/2023 9:18:43 AM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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

Laboratory Job ID: 880-29606-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-29606-1
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.
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: 880-29606-1
SDG: Hobbs NM

Job ID: 880-29606-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-29606-1**

Receipt

The sample was received on 6/15/2023 3:22 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 6.6°C

GC/MS VOA

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 860-108371 were outside control limits: (880-29607-C-1 MS). 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 860-108212 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recovery was within acceptance limits.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-108212 contained Fluoride greater than the method detection limit (MDL), and were not reanalyzed because this target analyte concentration was less than the reporting limit (RL). The data have been qualified and reported.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-108212 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFMS: The instrument blank/CCB for analytical batch 860-108213 contained Nitrite as N greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

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 860-108301 and analytical batch 860-108536 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 200.7: The following sample was diluted to bring the concentration of target analytes within the calibration range: Levey Well (880-29606-1). 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.

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: 880-29606-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-29606-1

Date Collected: 06/15/23 10:50

Matrix: Water

Date Received: 06/15/23 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00219		0.00100	0.000460 mg/L			06/18/23 20:24	1
Bromobenzene	<0.000665 U		0.00100	0.000665 mg/L			06/18/23 20:24	1
Bromochloromethane	<0.000657 U		0.00100	0.000657 mg/L			06/18/23 20:24	1
Bromodichloromethane	<0.000552 U		0.00100	0.000552 mg/L			06/18/23 20:24	1
Bromoform	<0.000633 U		0.00500	0.000633 mg/L			06/18/23 20:24	1
Bromomethane	<0.00142 U		0.00500	0.00142 mg/L			06/18/23 20:24	1
2-Butanone	<0.00828 U		0.0500	0.00828 mg/L			06/18/23 20:24	1
Carbon tetrachloride	<0.000896 U		0.00500	0.000896 mg/L			06/18/23 20:24	1
Chlorobenzene	<0.000530 U		0.00100	0.000530 mg/L			06/18/23 20:24	1
Chloroethane	<0.00198 U		0.0100	0.00198 mg/L			06/18/23 20:24	1
Chloroform	<0.000643 U		0.00100	0.000643 mg/L			06/18/23 20:24	1
Chloromethane	<0.00204 U		0.0100	0.00204 mg/L			06/18/23 20:24	1
2-Chlorotoluene	<0.00118 U		0.00200	0.00118 mg/L			06/18/23 20:24	1
4-Chlorotoluene	<0.000472 U		0.00100	0.000472 mg/L			06/18/23 20:24	1
cis-1,2-Dichloroethene	<0.000714 U		0.00100	0.000714 mg/L			06/18/23 20:24	1
cis-1,3-Dichloropropene	<0.00107 U		0.00500	0.00107 mg/L			06/18/23 20:24	1
Dibromochloromethane	<0.000547 U		0.00500	0.000547 mg/L			06/18/23 20:24	1
1,2-Dibromo-3-Chloropropane	<0.00127 U		0.00500	0.00127 mg/L			06/18/23 20:24	1
1,2-Dibromoethane	<0.000999 U		0.00500	0.000999 mg/L			06/18/23 20:24	1
1,2-Dichlorobenzene	<0.000509 U		0.00100	0.000509 mg/L			06/18/23 20:24	1
1,3-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			06/18/23 20:24	1
1,4-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			06/18/23 20:24	1
Dichlorodifluoromethane	<0.000919 U		0.00100	0.000919 mg/L			06/18/23 20:24	1
1,1-Dichloroethane	<0.000635 U		0.00100	0.000635 mg/L			06/18/23 20:24	1
1,2-Dichloroethane	<0.000590 U		0.00100	0.000590 mg/L			06/18/23 20:24	1
1,1-Dichloroethene	<0.000738 U		0.00100	0.000738 mg/L			06/18/23 20:24	1
1,2-Dichloropropane	<0.000667 U		0.00500	0.000667 mg/L			06/18/23 20:24	1
1,3-Dichloropropane	<0.000514 U		0.00500	0.000514 mg/L			06/18/23 20:24	1
2,2-Dichloropropane	<0.000780 U		0.00500	0.000780 mg/L			06/18/23 20:24	1
1,1-Dichloropropene	<0.00160 U		0.00500	0.00160 mg/L			06/18/23 20:24	1
Ethylbenzene	0.00761		0.00100	0.000411 mg/L			06/18/23 20:24	1
Hexachlorobutadiene	<0.00126 U		0.00500	0.00126 mg/L			06/18/23 20:24	1
Isopropylbenzene	0.00398		0.00100	0.000613 mg/L			06/18/23 20:24	1
Methylene Chloride	<0.00173 U		0.00500	0.00173 mg/L			06/18/23 20:24	1
m,p-Xylenes	0.0292		0.0100	0.00124 mg/L			06/18/23 20:24	1
MTBE	<0.00139 U		0.00500	0.00139 mg/L			06/18/23 20:24	1
Naphthalene	<0.00135 U		0.0100	0.00135 mg/L			06/18/23 20:24	1
n-Butylbenzene	<0.000644 U		0.00100	0.000644 mg/L			06/18/23 20:24	1
N-Propylbenzene	0.00175		0.00100	0.000498 mg/L			06/18/23 20:24	1
o-Xylene	0.00487		0.00100	0.000551 mg/L			06/18/23 20:24	1
p-Cymene (p-Isopropyltoluene)	<0.000919 U		0.00100	0.000919 mg/L			06/18/23 20:24	1
sec-Butylbenzene	<0.000468 U		0.00100	0.000468 mg/L			06/18/23 20:24	1
Styrene	<0.000655 U		0.00100	0.000655 mg/L			06/18/23 20:24	1
tert-Butylbenzene	<0.000442 U		0.00100	0.000442 mg/L			06/18/23 20:24	1
1,1,1,2-Tetrachloroethane	<0.000644 U		0.00100	0.000644 mg/L			06/18/23 20:24	1
1,1,2,2-Tetrachloroethane	<0.000470 U		0.00100	0.000470 mg/L			06/18/23 20:24	1
Tetrachloroethene	<0.000801 U		0.00100	0.000801 mg/L			06/18/23 20:24	1
Toluene	0.0154		0.00100	0.000475 mg/L			06/18/23 20:24	1
trans-1,2-Dichloroethene	<0.000945 U		0.00100	0.000945 mg/L			06/18/23 20:24	1

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Client Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-29606-1

Date Collected: 06/15/23 10:50

Matrix: Water

Date Received: 06/15/23 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 20:24	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/18/23 20:24	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/18/23 20:24	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/18/23 20:24	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/18/23 20:24	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/18/23 20:24	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/18/23 20:24	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/18/23 20:24	1
1,2,4-Trimethylbenzene	0.00744		0.00100	0.000417 mg/L			06/18/23 20:24	1
1,3,5-Trimethylbenzene	0.00229		0.00100	0.000456 mg/L			06/18/23 20:24	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/18/23 20:24	1
Xylenes, Total	0.0341		0.0100	0.00124 mg/L			06/18/23 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		74 - 124		06/18/23 20:24	1
Dibromofluoromethane (Surr)	99		75 - 131		06/18/23 20:24	1
1,2-Dichloroethane-d4 (Surr)	98		63 - 144		06/18/23 20:24	1
Toluene-d8 (Surr)	104		80 - 120		06/18/23 20:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.372	J	0.500	0.0711 mg/L			06/17/23 01:16	1
Nitrate as N	0.139		0.100	0.0391 mg/L			06/17/23 01:16	1
Chloride	230		0.500	0.250 mg/L			06/17/23 01:16	1
Nitrite as N	0.348		0.100	0.0293 mg/L			06/17/23 01:16	1
Fluoride	0.474	J	0.500	0.100 mg/L			06/17/23 01:16	1
Sulfate	49.7		0.500	0.200 mg/L			06/17/23 01:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	255		10.0	5.76 mg/L		06/17/23 11:30	06/19/23 13:00	50
Magnesium	49.6		0.200	0.0428 mg/L		06/17/23 11:30	06/19/23 12:47	1
Potassium	3.91		0.500	0.0914 mg/L		06/17/23 11:30	06/19/23 12:47	1
Sodium	81.1		0.500	0.152 mg/L		06/17/23 11:30	06/19/23 12:47	1
SiO2	66.1		1.07	0.471 mg/L		06/17/23 11:30	06/19/23 12:47	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	-6.66			%			06/19/23 08:37	1
Alkalinity (SM 2320B)	679		4.00	4.00 mg/L			06/19/23 15:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	679		4.00	4.00 mg/L			06/19/23 15:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/19/23 15:13	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/19/23 15:13	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/19/23 15:13	1
Total Dissolved Solids (SM 2540C)	1380		10.0	10.0 mg/L			06/17/23 15:49	1
pH (SM 4500 H+ B)	6.5	HF		SU			06/19/23 16:04	1
Temperature (SM 4500 H+ B)	20.7	HF		Degrees C			06/19/23 16:04	1

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Surrogate Summary

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

Job ID: 880-29606-1
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 (80-120)
880-29606-1	Levey Well	104	99	98	104
LCS 860-108371/1011	Lab Control Sample	100	101	98	99
LCSD 860-108371/12	Lab Control Sample Dup	101	100	99	99
MB 860-108371/17	Method Blank	102	97	99	104
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: 880-29606-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-108371/17

Matrix: Water

Analysis Batch: 108371

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/18/23 19:01	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/18/23 19:01	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/18/23 19:01	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/18/23 19:01	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/18/23 19:01	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/18/23 19:01	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/18/23 19:01	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/18/23 19:01	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/18/23 19:01	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/18/23 19:01	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/18/23 19:01	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/18/23 19:01	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/18/23 19:01	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/18/23 19:01	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/18/23 19:01	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/18/23 19:01	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/18/23 19:01	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 19:01	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/18/23 19:01	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/18/23 19:01	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 19:01	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 19:01	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 19:01	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/18/23 19:01	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/18/23 19:01	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/18/23 19:01	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/18/23 19:01	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/18/23 19:01	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/18/23 19:01	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/18/23 19:01	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/18/23 19:01	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/18/23 19:01	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/18/23 19:01	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/18/23 19:01	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/18/23 19:01	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/18/23 19:01	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/18/23 19:01	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/18/23 19:01	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/18/23 19:01	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/18/23 19:01	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 19:01	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/18/23 19:01	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/18/23 19:01	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/18/23 19:01	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/18/23 19:01	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/18/23 19:01	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/18/23 19:01	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/18/23 19:01	1

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QC Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-108371/17

Matrix: Water

Analysis Batch: 108371

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			06/18/23 19:01	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 19:01	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/18/23 19:01	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/18/23 19:01	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/18/23 19:01	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/18/23 19:01	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/18/23 19:01	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/18/23 19:01	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/18/23 19:01	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/18/23 19:01	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/18/23 19:01	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/18/23 19:01	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/18/23 19:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		06/18/23 19:01	1
Dibromofluoromethane (Surr)	97		75 - 131		06/18/23 19:01	1
1,2-Dichloroethane-d4 (Surr)	99		63 - 144		06/18/23 19:01	1
Toluene-d8 (Surr)	104		80 - 120		06/18/23 19:01	1

Lab Sample ID: LCS 860-108371/1011

Matrix: Water

Analysis Batch: 108371

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	0.05007		mg/L		100	75 - 125
Bromobenzene	0.0500	0.05171		mg/L		103	75 - 125
Bromochloromethane	0.0500	0.05108		mg/L		102	60 - 140
Bromodichloromethane	0.0500	0.05091		mg/L		102	75 - 125
Bromoform	0.0500	0.05467		mg/L		109	70 - 130
Bromomethane	0.0500	0.04726		mg/L		95	60 - 140
2-Butanone	0.250	0.2491		mg/L		100	60 - 140
Carbon tetrachloride	0.0500	0.04893		mg/L		98	70 - 130
Chlorobenzene	0.0500	0.05050		mg/L		101	65 - 135
Chloroethane	0.0500	0.05085		mg/L		102	60 - 140
Chloroform	0.0500	0.05165		mg/L		103	70 - 121
Chloromethane	0.0500	0.05134		mg/L		103	60 - 140
2-Chlorotoluene	0.0500	0.05022		mg/L		100	73 - 125
4-Chlorotoluene	0.0500	0.05147		mg/L		103	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05062		mg/L		101	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05170		mg/L		103	74 - 125
Dibromochloromethane	0.0500	0.05237		mg/L		105	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05277		mg/L		106	59 - 125
1,2-Dibromoethane	0.0500	0.05116		mg/L		102	73 - 125
1,2-Dichlorobenzene	0.0500	0.05072		mg/L		101	75 - 125
1,3-Dichlorobenzene	0.0500	0.05149		mg/L		103	75 - 125
1,4-Dichlorobenzene	0.0500	0.05002		mg/L		100	75 - 125
Dichlorodifluoromethane	0.0500	0.04770		mg/L		95	50 - 150

Eurofins Midland

QC Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-108371/1011

Matrix: Water

Analysis Batch: 108371

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	0.05017		mg/L		100	70 - 130
1,2-Dichloroethane	0.0500	0.05042		mg/L		101	72 - 130
1,1-Dichloroethene	0.0500	0.05027		mg/L		101	50 - 150
1,2-Dichloropropane	0.0500	0.04989		mg/L		100	74 - 125
1,3-Dichloropropane	0.0500	0.05072		mg/L		101	75 - 125
2,2-Dichloropropane	0.0500	0.04877		mg/L		98	75 - 125
1,1-Dichloropropene	0.0500	0.04985		mg/L		100	75 - 125
Ethylbenzene	0.0500	0.05067		mg/L		101	75 - 125
Hexachlorobutadiene	0.0500	0.05040		mg/L		101	75 - 125
Isopropylbenzene	0.0500	0.05827		mg/L		117	75 - 125
Methylene Chloride	0.0500	0.05185		mg/L		104	71 - 125
m,p-Xylenes	0.0500	0.05060		mg/L		101	75 - 125
MTBE	0.0500	0.05183		mg/L		104	65 - 135
Naphthalene	0.0500	0.05332		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05078		mg/L		102	75 - 125
N-Propylbenzene	0.0500	0.05129		mg/L		103	75 - 125
o-Xylene	0.0500	0.05148		mg/L		103	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05161		mg/L		103	75 - 125
sec-Butylbenzene	0.0500	0.05069		mg/L		101	75 - 125
Styrene	0.0500	0.05239		mg/L		105	75 - 125
tert-Butylbenzene	0.0500	0.05136		mg/L		103	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05233		mg/L		105	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05153		mg/L		103	74 - 125
Tetrachloroethene	0.0500	0.04916		mg/L		98	71 - 125
Toluene	0.0500	0.05040		mg/L		101	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05046		mg/L		101	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05156		mg/L		103	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05195		mg/L		104	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05262		mg/L		105	75 - 135
1,1,1-Trichloroethane	0.0500	0.05096		mg/L		102	70 - 130
1,1,2-Trichloroethane	0.0500	0.05069		mg/L		101	70 - 130
Trichloroethene	0.0500	0.05127		mg/L		103	75 - 135
Trichlorofluoromethane	0.0500	0.05074		mg/L		101	60 - 140
1,2,3-Trichloropropane	0.0500	0.05253		mg/L		105	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05135		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05147		mg/L		103	60 - 140
Vinyl chloride	0.0500	0.05034		mg/L		101	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
Toluene-d8 (Surr)	99		80 - 120

Eurofins Midland

QC Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-108371/12

Matrix: Water

Analysis Batch: 108371

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	0.04549		mg/L		91	75 - 125	10	25
Bromobenzene	0.0500	0.04821		mg/L		96	75 - 125	7	25
Bromochloromethane	0.0500	0.04650		mg/L		93	60 - 140	9	25
Bromodichloromethane	0.0500	0.04666		mg/L		93	75 - 125	9	25
Bromoform	0.0500	0.05098		mg/L		102	70 - 130	7	25
Bromomethane	0.0500	0.04323		mg/L		86	60 - 140	9	25
2-Butanone	0.250	0.2305		mg/L		92	60 - 140	8	25
Carbon tetrachloride	0.0500	0.04555		mg/L		91	70 - 130	7	25
Chlorobenzene	0.0500	0.04540		mg/L		91	65 - 135	11	25
Chloroethane	0.0500	0.05480		mg/L		110	60 - 140	7	25
Chloroform	0.0500	0.04628		mg/L		93	70 - 121	11	25
Chloromethane	0.0500	0.04575		mg/L		92	60 - 140	12	25
2-Chlorotoluene	0.0500	0.04582		mg/L		92	73 - 125	9	25
4-Chlorotoluene	0.0500	0.04708		mg/L		94	74 - 125	9	25
cis-1,2-Dichloroethene	0.0500	0.04573		mg/L		91	75 - 125	10	25
cis-1,3-Dichloropropene	0.0500	0.04736		mg/L		95	74 - 125	9	25
Dibromochloromethane	0.0500	0.04718		mg/L		94	73 - 125	10	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05154		mg/L		103	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.04675		mg/L		94	73 - 125	9	25
1,2-Dichlorobenzene	0.0500	0.04712		mg/L		94	75 - 125	7	25
1,3-Dichlorobenzene	0.0500	0.04781		mg/L		96	75 - 125	7	25
1,4-Dichlorobenzene	0.0500	0.04630		mg/L		93	75 - 125	8	25
Dichlorodifluoromethane	0.0500	0.04337		mg/L		87	50 - 150	10	25
1,1-Dichloroethane	0.0500	0.04647		mg/L		93	70 - 130	8	25
1,2-Dichloroethane	0.0500	0.04691		mg/L		94	72 - 130	7	25
1,1-Dichloroethene	0.0500	0.04519		mg/L		90	50 - 150	11	25
1,2-Dichloropropane	0.0500	0.04548		mg/L		91	74 - 125	9	25
1,3-Dichloropropane	0.0500	0.04651		mg/L		93	75 - 125	9	25
2,2-Dichloropropane	0.0500	0.04291		mg/L		86	75 - 125	13	25
1,1-Dichloropropene	0.0500	0.04492		mg/L		90	75 - 125	10	25
Ethylbenzene	0.0500	0.04618		mg/L		92	75 - 125	9	25
Hexachlorobutadiene	0.0500	0.04836		mg/L		97	75 - 125	4	25
Isopropylbenzene	0.0500	0.05155		mg/L		103	75 - 125	12	25
Methylene Chloride	0.0500	0.04675		mg/L		93	71 - 125	10	25
m,p-Xylenes	0.0500	0.04637		mg/L		93	75 - 125	9	25
MTBE	0.0500	0.04733		mg/L		95	65 - 135	9	25
Naphthalene	0.0500	0.05471		mg/L		109	70 - 130	3	25
n-Butylbenzene	0.0500	0.04705		mg/L		94	75 - 125	8	25
N-Propylbenzene	0.0500	0.04736		mg/L		95	75 - 125	8	25
o-Xylene	0.0500	0.04572		mg/L		91	75 - 125	12	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04737		mg/L		95	75 - 125	9	25
sec-Butylbenzene	0.0500	0.04682		mg/L		94	75 - 125	8	25
Styrene	0.0500	0.04755		mg/L		95	75 - 125	10	25
tert-Butylbenzene	0.0500	0.04666		mg/L		93	75 - 125	10	25
1,1,1,2-Tetrachloroethane	0.0500	0.04715		mg/L		94	72 - 125	10	25
1,1,1,2,2-Tetrachloroethane	0.0500	0.04911		mg/L		98	74 - 125	5	25
Tetrachloroethene	0.0500	0.04568		mg/L		91	71 - 125	7	25
Toluene	0.0500	0.04486		mg/L		90	70 - 130	12	25

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QC Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-108371/12

Matrix: Water

Analysis Batch: 108371

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	0.04525		mg/L		91	75 - 125	11	25
trans-1,3-Dichloropropene	0.0500	0.04746		mg/L		95	66 - 125	8	25
1,2,3-Trichlorobenzene	0.0500	0.05243		mg/L		105	75 - 137	1	25
1,2,4-Trichlorobenzene	0.0500	0.05133		mg/L		103	75 - 135	2	25
1,1,1-Trichloroethane	0.0500	0.04597		mg/L		92	70 - 130	10	25
1,1,2-Trichloroethane	0.0500	0.04598		mg/L		92	70 - 130	10	25
Trichloroethene	0.0500	0.04693		mg/L		94	75 - 135	9	25
Trichlorofluoromethane	0.0500	0.04613		mg/L		92	60 - 140	10	25
1,2,3-Trichloropropane	0.0500	0.04918		mg/L		98	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.04699		mg/L		94	75 - 125	9	25
1,3,5-Trimethylbenzene	0.0500	0.04646		mg/L		93	60 - 140	10	25
Vinyl chloride	0.0500	0.04641		mg/L		93	60 - 140	8	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	99		80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-108212/3

Matrix: Water

Analysis Batch: 108212

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			06/16/23 15:04	1
Chloride	<0.250	U	0.500	0.250 mg/L			06/16/23 15:04	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/16/23 15:04	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/16/23 15:04	1

Lab Sample ID: LCS 860-108212/4

Matrix: Water

Analysis Batch: 108212

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	9.584		mg/L		96	90 - 110
Chloride	10.0	9.688		mg/L		97	90 - 110
Fluoride	10.0	10.06		mg/L		101	90 - 110
Sulfate	10.0	9.737		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-108212/5

Matrix: Water

Analysis Batch: 108212

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	9.602		mg/L		96	90 - 110	0	20
Chloride	10.0	9.702		mg/L		97	90 - 110	0	20
Fluoride	10.0	10.18		mg/L		102	90 - 110	1	20

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QC Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-108212/5

Matrix: Water

Analysis Batch: 108212

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	9.753		mg/L		98	90 - 110	0	20

Lab Sample ID: LLCS 860-108212/7

Matrix: Water

Analysis Batch: 108212

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	0.4350	J	mg/L		87	50 - 150
Chloride	0.500	0.4737	J	mg/L		95	50 - 150
Fluoride	0.500	0.4143	J	mg/L		83	50 - 150
Sulfate	0.500	0.4778	J	mg/L		96	50 - 150

Lab Sample ID: MB 860-108213/3

Matrix: Water

Analysis Batch: 108213

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			06/16/23 15:04	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			06/16/23 15:04	1

Lab Sample ID: LCS 860-108213/4

Matrix: Water

Analysis Batch: 108213

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	9.805		mg/L		98	80 - 120
Nitrite as N	10.0	9.922		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-108213/5

Matrix: Water

Analysis Batch: 108213

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	9.814		mg/L		98	80 - 120	0	20
Nitrite as N	10.0	9.939		mg/L		99	80 - 120	0	20

Lab Sample ID: LLCS 860-108213/6

Matrix: Water

Analysis Batch: 108213

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	0.09830	J	mg/L		98	50 - 150
Nitrite as N	0.100	0.09947	J	mg/L		99	50 - 150

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QC Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-108301/1-A

Matrix: Water

Analysis Batch: 108536

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 108301

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		06/17/23 11:30	06/19/23 11:33	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		06/17/23 11:30	06/19/23 11:33	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		06/17/23 11:30	06/19/23 11:33	1
Sodium	<0.152	U	0.500	0.152 mg/L		06/17/23 11:30	06/19/23 11:33	1
SiO2	<0.471	U	1.07	0.471 mg/L		06/17/23 11:30	06/19/23 11:33	1

Lab Sample ID: LCS 860-108301/2-A

Matrix: Water

Analysis Batch: 108536

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 108301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	23.20		mg/L		93	85 - 115
Magnesium	25.0	22.40		mg/L		90	85 - 115
Potassium	10.0	9.240		mg/L		92	85 - 115
Sodium	25.0	23.40		mg/L		94	85 - 115
SiO2	21.4	20.29		mg/L		95	85 - 115

Lab Sample ID: LCSD 860-108301/3-A

Matrix: Water

Analysis Batch: 108536

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 108301

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	23.50		mg/L		94	85 - 115	1	20
Magnesium	25.0	22.80		mg/L		91	85 - 115	2	20
Potassium	10.0	9.340		mg/L		93	85 - 115	1	20
Sodium	25.0	23.60		mg/L		94	85 - 115	1	20
SiO2	21.4	20.61		mg/L		96	85 - 115	2	20

Lab Sample ID: 880-29606-1 MS

Matrix: Water

Analysis Batch: 108536

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 108301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	253		25.0	272.0	4	mg/L		76	70 - 130
Magnesium	49.6		25.0	71.90		mg/L		89	70 - 130
Potassium	3.91		10.0	13.70		mg/L		98	70 - 130
Sodium	81.1		25.0	104.0		mg/L		92	70 - 130
SiO2	66.1		21.4	87.10		mg/L		98	70 - 130

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-108543/3

Matrix: Water

Analysis Batch: 108543

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			06/19/23 11:39	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/19/23 11:39	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/19/23 11:39	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			06/19/23 11:39	1

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QC Sample Results

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

Job ID: 880-29606-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 860-108543/3

Matrix: Water

Analysis Batch: 108543

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			06/19/23 11:39	1

Lab Sample ID: LCS 860-108543/4

Matrix: Water

Analysis Batch: 108543

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 860-108543/5

Matrix: Water

Analysis Batch: 108543

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	253.7		mg/L		101	85 - 115	1	20

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

Lab Sample ID: MB 860-108321/1

Matrix: Water

Analysis Batch: 108321

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			06/17/23 15:49	1

Lab Sample ID: LCS 860-108321/2

Matrix: Water

Analysis Batch: 108321

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	1002		mg/L		100	80 - 120

Lab Sample ID: LCSD 860-108321/3

Matrix: Water

Analysis Batch: 108321

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	1002		mg/L		100	80 - 120	0	10

Lab Sample ID: LLCS 860-108321/4

Matrix: Water

Analysis Batch: 108321

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	5.00	6.000		mg/L		120	50 - 150

Eurofins Midland

QC Association Summary

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

Job ID: 880-29606-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 108371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total/NA	Water	8260C	
MB 860-108371/17	Method Blank	Total/NA	Water	8260C	
LCS 860-108371/1011	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-108371/12	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 108212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total/NA	Water	300.0	
MB 860-108212/3	Method Blank	Total/NA	Water	300.0	
LCS 860-108212/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-108212/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-108212/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 108213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total/NA	Water	300.0	
MB 860-108213/3	Method Blank	Total/NA	Water	300.0	
LCS 860-108213/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-108213/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-108213/6	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 108301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-108301/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-108301/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-108301/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
880-29606-1 MS	Levey Well	Total Recoverable	Water	200.7	

Analysis Batch: 108536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	108301
880-29606-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	108301
MB 860-108301/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	108301
LCS 860-108301/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	108301
LCSD 860-108301/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	108301
880-29606-1 MS	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	108301

General Chemistry

Analysis Batch: 107460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total/NA	Water	SM 1030E	

Analysis Batch: 108321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-108321/1	Method Blank	Total/NA	Water	SM 2540C	

Eurofins Midland

QC Association Summary

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

Job ID: 880-29606-1
SDG: Hobbs NM

General Chemistry (Continued)

Analysis Batch: 108321 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-108321/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-108321/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LLCS 860-108321/4	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 108534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 108543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29606-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-108543/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-108543/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-108543/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Lab Chronicle

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

Job ID: 880-29606-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-29606-1
Date Collected: 06/15/23 10:50 Matrix: Water
Date Received: 06/15/23 15:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	108371	NA	EET HOU	06/18/23 20:24
Total/NA	Analysis	300.0		1	108212	A1S	EET HOU	06/17/23 01:16
Total/NA	Analysis	300.0		1	108213	A1S	EET HOU	06/17/23 01:16
Total Recoverable	Prep	200.7			108301	MD	EET HOU	06/17/23 11:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	108536	JDM	EET HOU	06/19/23 12:47
Total Recoverable	Prep	200.7			108301	MD	EET HOU	06/17/23 11:30
Total Recoverable	Analysis	200.7 Rev 4.4		50	108536	JDM	EET HOU	06/19/23 13:00
Total/NA	Analysis	SM 1030E		1	107460	SC	EET HOU	06/19/23 08:37
Total/NA	Analysis	SM 2320B		1	108543	TL	EET HOU	06/19/23 15:13
Total/NA	Analysis	SM 2540C		1	108321	OH	EET HOU	06/17/23 15:49
Total/NA	Analysis	SM 4500 H+ B		1	108534	TL	EET HOU	06/19/23 16:04

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: 880-29606-1
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	T104704215-23-50	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
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: 880-29606-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	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
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: 880-29606-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-29606-1	Levey Well	Water	06/15/23 10:50	06/15/23 15:22

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



Chain of Custody

Work Order No: 20110510

Houston TX (281) 240-4200 Dallas, TX (214) 902-0380 San Antonio TX (210) 508-3334
 (575-392-7550) Phoenix AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa FL (813-
 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 (813-620-3000)

Page 1 of 4

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

6-20-2000) www.xenco.com Page 1 of 1

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting 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 14 hr
Sampler's Name	Shane Diller		Due Date

SAMPLE RECEIPT		Temp Blank.	Yes	No ☒	Wet Ice	(Yes) No
Temperature (°C)	6.9/6.6					
Received In tact:	(Yes) No ☒					
Cooler Custody Seals.	Yes No ☒					
Sample Custody Seals.	Yes No ☒					
	Thermometer ID		1128			
	Correction Factor:		-30			
	Total Containers					

ANALYSIS REQUEST										Work Order Notes
Number of Containers										TAT starts the day received by the lab if received by 4:30pm
F, Cl, SO4, B										
Ca, K, Mg, Na, Si										
y										

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number	VOCs	Anions:	Cations:	pH	Alkalinity	TDS	Sample Comments	
Levey Well	GW		6-15-27	1050		7	X	X	X	X	X	X		24hr
 880-29606 Chain of Custody														



880-29606 Chain of Custody

Total 200.7 / 6010 200.8 / 6020:

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

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 747

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 \$6 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 		01/15/23	2		
3		1522	4		
5			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29606-1

SDG Number: Hobbs NM

Login Number: 29606

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
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: 880-29606-1

SDG Number: Hobbs NM

Login Number: 29606

List Number: 2

Creator: Babar, Syed

List Source: Eurofins Houston

List Creation: 06/16/23 03:55 PM

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



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/27/2023 9:48:40 PM

JOB DESCRIPTION

Levey Well Hobbs, NM - 03B1417001
SDG NUMBER Hobbs NM

JOB NUMBER

880-29966-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/27/2023 9:48:40 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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

Laboratory Job ID: 880-29966-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-29966-1
SDG: Hobbs NM

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.

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: 880-29966-1
SDG: Hobbs NM

Job ID: 880-29966-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-29966-1

Receipt

The sample was received on 6/23/2023 2:54 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 1.0°C

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) associated with batch 860-109461 recovered above the upper control limit for 1,2,4-Trichlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 860-109461/2).

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 860-109419 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recovery is within acceptance limits.

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

Metals

Method 200.7: Due to the high concentration of Sodium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-109447 and analytical batch 860-109722 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

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

General Chemistry

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

Client Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-29966-1

Date Collected: 06/23/23 10:00

Matrix: Water

Date Received: 06/23/23 14:54

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00365		0.00100	0.000460 mg/L			06/26/23 13:36	1
Bromobenzene	<0.000665 U		0.00100	0.000665 mg/L			06/26/23 13:36	1
Bromochloromethane	<0.000657 U		0.00100	0.000657 mg/L			06/26/23 13:36	1
Bromodichloromethane	<0.000552 U		0.00100	0.000552 mg/L			06/26/23 13:36	1
Bromoform	<0.000633 U		0.00500	0.000633 mg/L			06/26/23 13:36	1
Bromomethane	<0.00142 U		0.00500	0.00142 mg/L			06/26/23 13:36	1
2-Butanone	<0.00828 U		0.0500	0.00828 mg/L			06/26/23 13:36	1
Carbon tetrachloride	<0.000896 U		0.00500	0.000896 mg/L			06/26/23 13:36	1
Chlorobenzene	<0.000530 U		0.00100	0.000530 mg/L			06/26/23 13:36	1
Chloroethane	<0.00198 U		0.0100	0.00198 mg/L			06/26/23 13:36	1
Chloroform	<0.000643 U		0.00100	0.000643 mg/L			06/26/23 13:36	1
Chloromethane	<0.00204 U		0.0100	0.00204 mg/L			06/26/23 13:36	1
2-Chlorotoluene	<0.00118 U		0.00200	0.00118 mg/L			06/26/23 13:36	1
4-Chlorotoluene	<0.000472 U		0.00100	0.000472 mg/L			06/26/23 13:36	1
cis-1,2-Dichloroethene	<0.000714 U		0.00100	0.000714 mg/L			06/26/23 13:36	1
cis-1,3-Dichloropropene	<0.00107 U		0.00500	0.00107 mg/L			06/26/23 13:36	1
Dibromochloromethane	<0.000547 U		0.00500	0.000547 mg/L			06/26/23 13:36	1
1,2-Dibromo-3-Chloropropane	<0.00127 U		0.00500	0.00127 mg/L			06/26/23 13:36	1
1,2-Dibromoethane	<0.000999 U		0.00500	0.000999 mg/L			06/26/23 13:36	1
1,2-Dichlorobenzene	<0.000509 U		0.00100	0.000509 mg/L			06/26/23 13:36	1
1,3-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			06/26/23 13:36	1
1,4-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			06/26/23 13:36	1
Dichlorodifluoromethane	<0.000919 U		0.00100	0.000919 mg/L			06/26/23 13:36	1
1,1-Dichloroethane	<0.000635 U		0.00100	0.000635 mg/L			06/26/23 13:36	1
1,2-Dichloroethane	<0.000590 U		0.00100	0.000590 mg/L			06/26/23 13:36	1
1,1-Dichloroethene	<0.000738 U		0.00100	0.000738 mg/L			06/26/23 13:36	1
1,2-Dichloropropane	<0.000667 U		0.00500	0.000667 mg/L			06/26/23 13:36	1
1,3-Dichloropropane	<0.000514 U		0.00500	0.000514 mg/L			06/26/23 13:36	1
2,2-Dichloropropane	<0.000780 U		0.00500	0.000780 mg/L			06/26/23 13:36	1
1,1-Dichloropropene	<0.00160 U		0.00500	0.00160 mg/L			06/26/23 13:36	1
Ethylbenzene	0.0139		0.00100	0.000411 mg/L			06/26/23 13:36	1
Hexachlorobutadiene	<0.00126 U		0.00500	0.00126 mg/L			06/26/23 13:36	1
Isopropylbenzene	0.00633		0.00100	0.000613 mg/L			06/26/23 13:36	1
Methylene Chloride	<0.00173 U		0.00500	0.00173 mg/L			06/26/23 13:36	1
m,p-Xylenes	0.0564		0.0100	0.00124 mg/L			06/26/23 13:36	1
MTBE	<0.00139 U		0.00500	0.00139 mg/L			06/26/23 13:36	1
Naphthalene	<0.00135 U		0.0100	0.00135 mg/L			06/26/23 13:36	1
n-Butylbenzene	0.000789 J		0.00100	0.000644 mg/L			06/26/23 13:36	1
N-Propylbenzene	0.00291		0.00100	0.000498 mg/L			06/26/23 13:36	1
o-Xylene	0.00865		0.00100	0.000551 mg/L			06/26/23 13:36	1
p-Cymene (p-Isopropyltoluene)	<0.000919 U		0.00100	0.000919 mg/L			06/26/23 13:36	1
sec-Butylbenzene	0.00128		0.00100	0.000468 mg/L			06/26/23 13:36	1
Styrene	<0.000655 U		0.00100	0.000655 mg/L			06/26/23 13:36	1
tert-Butylbenzene	<0.000442 U		0.00100	0.000442 mg/L			06/26/23 13:36	1
1,1,1,2-Tetrachloroethane	<0.000644 U		0.00100	0.000644 mg/L			06/26/23 13:36	1
1,1,2,2-Tetrachloroethane	<0.000470 U		0.00100	0.000470 mg/L			06/26/23 13:36	1
Tetrachloroethene	<0.000801 U		0.00100	0.000801 mg/L			06/26/23 13:36	1
Toluene	0.0251		0.00100	0.000475 mg/L			06/26/23 13:36	1
trans-1,2-Dichloroethene	<0.000945 U		0.00100	0.000945 mg/L			06/26/23 13:36	1

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Client Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-29966-1

Date Collected: 06/23/23 10:00

Matrix: Water

Date Received: 06/23/23 14:54

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 13:36	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/26/23 13:36	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/26/23 13:36	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/26/23 13:36	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/26/23 13:36	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/26/23 13:36	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/26/23 13:36	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/26/23 13:36	1
1,2,4-Trimethylbenzene	0.0141		0.00100	0.000417 mg/L			06/26/23 13:36	1
1,3,5-Trimethylbenzene	0.00414		0.00100	0.000456 mg/L			06/26/23 13:36	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/26/23 13:36	1
Xylenes, Total	0.0651		0.0100	0.00124 mg/L			06/26/23 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		06/26/23 13:36	1
Dibromofluoromethane (Surr)	97		75 - 131		06/26/23 13:36	1
1,2-Dichloroethane-d4 (Surr)	111		63 - 144		06/26/23 13:36	1
Toluene-d8 (Surr)	101		80 - 120		06/26/23 13:36	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.386	J	0.500	0.0711 mg/L			06/24/23 17:11	1
Nitrate as N	0.123		0.100	0.0391 mg/L			06/24/23 17:11	1
Chloride	239		0.500	0.250 mg/L			06/24/23 17:11	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			06/24/23 17:11	1
Fluoride	0.463	J	0.500	0.100 mg/L			06/24/23 17:11	1
Sulfate	50.8		0.500	0.200 mg/L			06/24/23 17:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	254		10.0	5.76 mg/L		06/25/23 19:08	06/26/23 15:54	50
Magnesium	50.9		0.200	0.0428 mg/L		06/25/23 19:08	06/26/23 15:32	1
Potassium	4.38		0.500	0.0914 mg/L		06/25/23 19:08	06/26/23 15:32	1
Sodium	81.4		0.500	0.152 mg/L		06/25/23 19:08	06/26/23 15:32	1
SiO2	63.6		1.07	0.471 mg/L		06/25/23 19:08	06/26/23 15:32	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	-8.19			%			06/27/23 20:37	1
Alkalinity (SM 2320B)	712		4.00	4.00 mg/L			06/26/23 13:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	712		4.00	4.00 mg/L			06/26/23 13:55	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/26/23 13:55	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/26/23 13:55	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/26/23 13:55	1
Total Dissolved Solids (SM 2540C)	1240		10.0	10.0 mg/L			06/26/23 15:26	1
pH (SM 4500 H+ B)	6.5	HF		SU			06/26/23 19:07	1
Temperature (SM 4500 H+ B)	20.5	HF		Degrees C			06/26/23 19:07	1

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Surrogate Summary

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

Job ID: 880-29966-1
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)	(80-120)
880-29966-1	Levey Well	98	97	111	101
LCS 860-109461/3	Lab Control Sample	91	93	100	98
LCSD 860-109461/4	Lab Control Sample Dup	93	92	99	97
MB 860-109461/9	Method Blank	96	99	108	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: 880-29966-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-109461/9

Matrix: Water

Analysis Batch: 109461

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/26/23 11:42	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/26/23 11:42	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/26/23 11:42	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/26/23 11:42	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/26/23 11:42	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/26/23 11:42	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/26/23 11:42	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/26/23 11:42	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/26/23 11:42	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/26/23 11:42	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/26/23 11:42	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/26/23 11:42	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/26/23 11:42	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/26/23 11:42	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/26/23 11:42	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/26/23 11:42	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/26/23 11:42	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 11:42	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/26/23 11:42	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/26/23 11:42	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 11:42	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 11:42	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 11:42	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/26/23 11:42	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/26/23 11:42	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/26/23 11:42	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/26/23 11:42	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/26/23 11:42	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/26/23 11:42	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/26/23 11:42	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/26/23 11:42	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/26/23 11:42	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/26/23 11:42	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/26/23 11:42	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 11:42	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/26/23 11:42	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/26/23 11:42	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 11:42	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/26/23 11:42	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/26/23 11:42	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 11:42	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/26/23 11:42	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/26/23 11:42	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/26/23 11:42	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 11:42	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/26/23 11:42	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/26/23 11:42	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/26/23 11:42	1

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QC Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-109461/9

Matrix: Water

Analysis Batch: 109461

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			06/26/23 11:42	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 11:42	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/26/23 11:42	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/26/23 11:42	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/26/23 11:42	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/26/23 11:42	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/26/23 11:42	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/26/23 11:42	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/26/23 11:42	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/26/23 11:42	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/26/23 11:42	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/26/23 11:42	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 11:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		74 - 124				06/26/23 11:42	1
Dibromofluoromethane (Surr)	99		75 - 131				06/26/23 11:42	1
1,2-Dichloroethane-d4 (Surr)	108		63 - 144				06/26/23 11:42	1
Toluene-d8 (Surr)	100		80 - 120				06/26/23 11:42	1

Lab Sample ID: LCS 860-109461/3

Matrix: Water

Analysis Batch: 109461

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	0.05263		mg/L		105	75 - 125
Bromobenzene	0.0500	0.05196		mg/L		104	75 - 125
Bromochloromethane	0.0500	0.05428		mg/L		109	60 - 140
Bromodichloromethane	0.0500	0.05499		mg/L		110	75 - 125
Bromoform	0.0500	0.05453		mg/L		109	70 - 130
Bromomethane	0.0500	0.05901		mg/L		118	60 - 140
2-Butanone	0.250	0.2131		mg/L		85	60 - 140
Carbon tetrachloride	0.0500	0.04885		mg/L		98	70 - 130
Chlorobenzene	0.0500	0.05331		mg/L		107	65 - 135
Chloroethane	0.0500	0.06380		mg/L		128	60 - 140
Chloroform	0.0500	0.04883		mg/L		98	70 - 121
Chloromethane	0.0500	0.04648		mg/L		93	60 - 140
2-Chlorotoluene	0.0500	0.05074		mg/L		101	73 - 125
4-Chlorotoluene	0.0500	0.05078		mg/L		102	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04903		mg/L		98	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05340		mg/L		107	74 - 125
Dibromochloromethane	0.0500	0.05847		mg/L		117	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05222		mg/L		104	59 - 125
1,2-Dibromoethane	0.0500	0.05314		mg/L		106	73 - 125
1,2-Dichlorobenzene	0.0500	0.05325		mg/L		107	75 - 125
1,3-Dichlorobenzene	0.0500	0.05344		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05380		mg/L		108	75 - 125
Dichlorodifluoromethane	0.0500	0.05617		mg/L		112	50 - 150

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QC Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-109461/3				Client Sample ID: Lab Control Sample			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 109461							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.04696		mg/L		94	70 - 130
1,2-Dichloroethane	0.0500	0.05735		mg/L		115	72 - 130
1,1-Dichloroethene	0.0500	0.05146		mg/L		103	50 - 150
1,2-Dichloropropane	0.0500	0.04742		mg/L		95	74 - 125
1,3-Dichloropropane	0.0500	0.05240		mg/L		105	75 - 125
2,2-Dichloropropane	0.0500	0.05383		mg/L		108	75 - 125
1,1-Dichloropropene	0.0500	0.04957		mg/L		99	75 - 125
Ethylbenzene	0.0500	0.05285		mg/L		106	75 - 125
Hexachlorobutadiene	0.0500	0.05758		mg/L		115	75 - 125
Isopropylbenzene	0.0500	0.05547		mg/L		111	75 - 125
Methylene Chloride	0.0500	0.04557		mg/L		91	71 - 125
m,p-Xylenes	0.0500	0.05419		mg/L		108	75 - 125
MTBE	0.0500	0.05118		mg/L		102	65 - 135
Naphthalene	0.0500	0.05359		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05142		mg/L		103	75 - 125
N-Propylbenzene	0.0500	0.05039		mg/L		101	75 - 125
o-Xylene	0.0500	0.05425		mg/L		108	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05446		mg/L		109	75 - 125
sec-Butylbenzene	0.0500	0.05265		mg/L		105	75 - 125
Styrene	0.0500	0.05694		mg/L		114	75 - 125
tert-Butylbenzene	0.0500	0.05309		mg/L		106	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05554		mg/L		111	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04401		mg/L		88	74 - 125
Tetrachloroethene	0.0500	0.05639		mg/L		113	71 - 125
Toluene	0.0500	0.04846		mg/L		97	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04916		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05634		mg/L		113	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05635		mg/L		113	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05981		mg/L		120	75 - 135
1,1,1-Trichloroethane	0.0500	0.05389		mg/L		108	70 - 130
1,1,2-Trichloroethane	0.0500	0.05085		mg/L		102	70 - 130
Trichloroethene	0.0500	0.05423		mg/L		108	75 - 135
Trichlorofluoromethane	0.0500	0.06139		mg/L		123	60 - 140
1,2,3-Trichloropropane	0.0500	0.04529		mg/L		91	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05225		mg/L		105	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05184		mg/L		104	60 - 140
Vinyl chloride	0.0500	0.05584		mg/L		112	60 - 140
		LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	91		74 - 124				
Dibromofluoromethane (Surr)	93		75 - 131				
1,2-Dichloroethane-d4 (Surr)	100		63 - 144				
Toluene-d8 (Surr)	98		80 - 120				

QC Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-109461/4

Matrix: Water

Analysis Batch: 109461

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	0.05139		mg/L		103	75 - 125	2	25
Bromobenzene	0.0500	0.05483		mg/L		110	75 - 125	5	25
Bromochloromethane	0.0500	0.05570		mg/L		111	60 - 140	3	25
Bromodichloromethane	0.0500	0.05601		mg/L		112	75 - 125	2	25
Bromoform	0.0500	0.05471		mg/L		109	70 - 130	0	25
Bromomethane	0.0500	0.06795		mg/L		136	60 - 140	14	25
2-Butanone	0.250	0.2180		mg/L		87	60 - 140	2	25
Carbon tetrachloride	0.0500	0.04666		mg/L		93	70 - 130	5	25
Chlorobenzene	0.0500	0.05448		mg/L		109	65 - 135	2	25
Chloroethane	0.0500	0.06712		mg/L		134	60 - 140	5	25
Chloroform	0.0500	0.04914		mg/L		98	70 - 121	1	25
Chloromethane	0.0500	0.05315		mg/L		106	60 - 140	13	25
2-Chlorotoluene	0.0500	0.05236		mg/L		105	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05257		mg/L		105	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.05005		mg/L		100	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05544		mg/L		111	74 - 125	4	25
Dibromochloromethane	0.0500	0.05950		mg/L		119	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05377		mg/L		108	59 - 125	3	25
1,2-Dibromoethane	0.0500	0.05406		mg/L		108	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05637		mg/L		113	75 - 125	6	25
1,3-Dichlorobenzene	0.0500	0.05552		mg/L		111	75 - 125	4	25
1,4-Dichlorobenzene	0.0500	0.05599		mg/L		112	75 - 125	4	25
Dichlorodifluoromethane	0.0500	0.05837		mg/L		117	50 - 150	4	25
1,1-Dichloroethane	0.0500	0.04946		mg/L		99	70 - 130	5	25
1,2-Dichloroethane	0.0500	0.05681		mg/L		114	72 - 130	1	25
1,1-Dichloroethene	0.0500	0.05164		mg/L		103	50 - 150	0	25
1,2-Dichloropropane	0.0500	0.04901		mg/L		98	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.05271		mg/L		105	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.05579		mg/L		112	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.04919		mg/L		98	75 - 125	1	25
Ethylbenzene	0.0500	0.05376		mg/L		108	75 - 125	2	25
Hexachlorobutadiene	0.0500	0.05937		mg/L		119	75 - 125	3	25
Isopropylbenzene	0.0500	0.05719		mg/L		114	75 - 125	3	25
Methylene Chloride	0.0500	0.04668		mg/L		93	71 - 125	2	25
m,p-Xylenes	0.0500	0.05451		mg/L		109	75 - 125	1	25
MTBE	0.0500	0.05391		mg/L		108	65 - 135	5	25
Naphthalene	0.0500	0.05845		mg/L		117	70 - 130	9	25
n-Butylbenzene	0.0500	0.05381		mg/L		108	75 - 125	5	25
N-Propylbenzene	0.0500	0.05250		mg/L		105	75 - 125	4	25
o-Xylene	0.0500	0.05502		mg/L		110	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05702		mg/L		114	75 - 125	5	25
sec-Butylbenzene	0.0500	0.05504		mg/L		110	75 - 125	4	25
Styrene	0.0500	0.05700		mg/L		114	75 - 125	0	25
tert-Butylbenzene	0.0500	0.05536		mg/L		111	75 - 125	4	25
1,1,1,2-Tetrachloroethane	0.0500	0.05685		mg/L		114	72 - 125	2	25
1,1,2,2-Tetrachloroethane	0.0500	0.04554		mg/L		91	74 - 125	3	25
Tetrachloroethene	0.0500	0.05789		mg/L		116	71 - 125	3	25
Toluene	0.0500	0.04937		mg/L		99	70 - 130	2	25

Eurofins Midland

QC Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-109461/4

Matrix: Water

Analysis Batch: 109461

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	0.04887		mg/L		98	75 - 125	1	25
trans-1,3-Dichloropropene	0.0500	0.05723		mg/L		114	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.06156		mg/L		123	75 - 137	9	25
1,2,4-Trichlorobenzene	0.0500	0.06442		mg/L		129	75 - 135	7	25
1,1,1-Trichloroethane	0.0500	0.05494		mg/L		110	70 - 130	2	25
1,1,2-Trichloroethane	0.0500	0.05240		mg/L		105	70 - 130	3	25
Trichloroethene	0.0500	0.05504		mg/L		110	75 - 135	1	25
Trichlorofluoromethane	0.0500	0.06427		mg/L		129	60 - 140	5	25
1,2,3-Trichloropropane	0.0500	0.04858		mg/L		97	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.05540		mg/L		111	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.05472		mg/L		109	60 - 140	5	25
Vinyl chloride	0.0500	0.05931		mg/L		119	60 - 140	6	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	93		74 - 124
Dibromofluoromethane (Surr)	92		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-109419/3

Matrix: Water

Analysis Batch: 109419

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			06/24/23 10:09	1
Chloride	<0.250	U	0.500	0.250 mg/L			06/24/23 10:09	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/24/23 10:09	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/24/23 10:09	1

Lab Sample ID: LCS 860-109419/4

Matrix: Water

Analysis Batch: 109419

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	9.665		mg/L		97	90 - 110
Chloride	10.0	9.864		mg/L		99	90 - 110
Fluoride	10.0	10.34		mg/L		103	90 - 110
Sulfate	10.0	9.079		mg/L		91	90 - 110

Lab Sample ID: LCSD 860-109419/5

Matrix: Water

Analysis Batch: 109419

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	9.656		mg/L		97	90 - 110	0	20
Chloride	10.0	9.844		mg/L		98	90 - 110	0	20
Fluoride	10.0	10.32		mg/L		103	90 - 110	0	20

Eurofins Midland

QC Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-109419/5

Matrix: Water

Analysis Batch: 109419

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	9.184		mg/L		92	90 - 110	1	20

Lab Sample ID: LLCS 860-109419/7

Matrix: Water

Analysis Batch: 109419

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	0.4443	J	mg/L		89	50 - 150		
Chloride	0.500	0.4950	J	mg/L		99	50 - 150		
Fluoride	0.500	0.5254		mg/L		105	50 - 150		
Sulfate	0.500	0.3778	J	mg/L		76	50 - 150		

Lab Sample ID: MB 860-109420/3

Matrix: Water

Analysis Batch: 109420

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			06/24/23 10:09	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			06/24/23 10:09	1

Lab Sample ID: LCS 860-109420/4

Matrix: Water

Analysis Batch: 109420

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	9.942		mg/L		99	80 - 120		
Nitrite as N	10.0	10.01		mg/L		100	80 - 120		

Lab Sample ID: LCSD 860-109420/5

Matrix: Water

Analysis Batch: 109420

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	0	20
Nitrite as N	10.0	10.00		mg/L		100	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-109447/1-A

Matrix: Water

Analysis Batch: 109722

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 109447

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		06/25/23 19:07	06/26/23 14:00	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		06/25/23 19:07	06/26/23 14:00	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		06/25/23 19:07	06/26/23 14:00	1
Sodium	<0.152	U	0.500	0.152 mg/L		06/25/23 19:07	06/26/23 14:00	1
SiO2	<0.471	U	1.07	0.471 mg/L		06/25/23 19:07	06/26/23 14:00	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-109447/2-A

Matrix: Water

Analysis Batch: 109722

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 109447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	26.40		mg/L		106	85 - 115
Magnesium	25.0	25.90		mg/L		104	85 - 115
Potassium	10.0	10.50		mg/L		105	85 - 115
Sodium	25.0	26.40		mg/L		106	85 - 115
SiO2	21.4	22.47		mg/L		105	85 - 115

Lab Sample ID: LCSD 860-109447/3-A

Matrix: Water

Analysis Batch: 109722

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 109447

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Calcium	25.0	26.40		mg/L		106	85 - 115	0	20
Magnesium	25.0	25.90		mg/L		104	85 - 115	0	20
Potassium	10.0	10.50		mg/L		105	85 - 115	0	20
Sodium	25.0	26.40		mg/L		106	85 - 115	0	20
SiO2	21.4	22.47		mg/L		105	85 - 115	0	20

Lab Sample ID: LLCS 860-109447/4-A

Matrix: Water

Analysis Batch: 109722

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 109447

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.200	0.1870	J	mg/L		94	50 - 150
Magnesium	0.200	0.1870	J	mg/L		94	50 - 150
Potassium	0.500	0.4890	J	mg/L		98	50 - 150
Sodium	0.500	0.4530	J	mg/L		91	50 - 150
SiO2	1.07	0.9181	J	mg/L		86	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-109600/3

Matrix: Water

Analysis Batch: 109600

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			06/26/23 10:39	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/26/23 10:39	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/26/23 10:39	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			06/26/23 10:39	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			06/26/23 10:39	1

Lab Sample ID: LCS 860-109600/4

Matrix: Water

Analysis Batch: 109600

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	251.4		mg/L		101	85 - 115

Eurofins Midland

QC Sample Results

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

Job ID: 880-29966-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-109600/5

Matrix: Water

Analysis Batch: 109600

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	251.2		mg/L		100	85 - 115	0	20

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

Lab Sample ID: MB 860-109602/1

Matrix: Water

Analysis Batch: 109602

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			06/26/23 15:26	1

Lab Sample ID: LCS 860-109602/2

Matrix: Water

Analysis Batch: 109602

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	1006		mg/L		101	80 - 120

Lab Sample ID: LCSD 860-109602/3

Matrix: Water

Analysis Batch: 109602

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	0	10

Lab Sample ID: LLCS 860-109602/4

Matrix: Water

Analysis Batch: 109602

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	5.00	5.500		mg/L		110	50 - 150

QC Association Summary

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

Job ID: 880-29966-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 109461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total/NA	Water	8260C	
MB 860-109461/9	Method Blank	Total/NA	Water	8260C	
LCS 860-109461/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-109461/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 109419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total/NA	Water	300.0	
MB 860-109419/3	Method Blank	Total/NA	Water	300.0	
LCS 860-109419/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109419/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-109419/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 109420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total/NA	Water	300.0	
MB 860-109420/3	Method Blank	Total/NA	Water	300.0	
LCS 860-109420/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109420/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 109447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-109447/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-109447/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-109447/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-109447/4-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 109722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	109447
880-29966-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	109447
MB 860-109447/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	109447
LCS 860-109447/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	109447
LCSD 860-109447/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	109447
LLCS 860-109447/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	109447

General Chemistry

Analysis Batch: 107460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total/NA	Water	SM 1030E	

Analysis Batch: 109600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-109600/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-109600/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Eurofins Midland

QC Association Summary

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

Job ID: 880-29966-1
SDG: Hobbs NM

General Chemistry (Continued)

Analysis Batch: 109600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 860-109600/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 109602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-109602/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-109602/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-109602/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LLCS 860-109602/4	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 109736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29966-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

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

Job ID: 880-29966-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-29966-1

Date Collected: 06/23/23 10:00

Matrix: Water

Date Received: 06/23/23 14:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	109461	AN	EET HOU	06/26/23 13:36
Total/NA	Analysis	300.0		1	109419	WP	EET HOU	06/24/23 17:11
Total/NA	Analysis	300.0		1	109420	WP	EET HOU	06/24/23 17:11
Total Recoverable	Prep	200.7			109447	AGR	EET HOU	06/25/23 19:08
Total Recoverable	Analysis	200.7 Rev 4.4		1	109722	JDM	EET HOU	06/26/23 15:32
Total Recoverable	Prep	200.7			109447	AGR	EET HOU	06/25/23 19:08
Total Recoverable	Analysis	200.7 Rev 4.4		50	109722	JDM	EET HOU	06/26/23 15:54
Total/NA	Analysis	SM 1030E		1	107460	SC	EET HOU	06/27/23 20:37
Total/NA	Analysis	SM 2320B		1	109600	TL	EET HOU	06/26/23 13:55
Total/NA	Analysis	SM 2540C		1	109602	OH	EET HOU	06/26/23 15:26
Total/NA	Analysis	SM 4500 H+ B		1	109736	TL	EET HOU	06/26/23 19:07

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: 880-29966-1
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	T104704215-23-50	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
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

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

Method Summary

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

Job ID: 880-29966-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	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
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: 880-29966-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-29966-1	Levey Well	Water	06/23/23 10:00	06/23/23 14:54

- 1
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- 11
- 12
- 13
- 14



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)565-3443 Lubbock TX (806)794-1296
Phoenix AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa FL (813) 251-1111
Hobbs NM (575-392-7550)

Chain of Custody

M



880-29966 Chain of Custody

Project Manager	Beaux Jennings	Bill to (if different)	
Company Name	Ensolum LLC	Company Name	
Address	601 Merrifield #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 ☐ 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	Wet Ice:	Yes	No
Temperature (°C).	18.1	☒	☐	Thermometer ID	112	
Received Inact:	☒	☐		Correction Factor:	-30	
Cooler Custody Seals.	Yes	No		Total Containers.		
Sample Custody Seals.	Yes	No				

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 ☒		Well Ice: ☒ No ☒												TAT starts the day received by the lab, if received by 4 30pm			
Temperature (°C):				131.0		Thermometer ID		JPE															
Received Intact:				Yes ☒ No ☐		Correction Factor:		-0.30															
Cooler Custody Seals:				Yes ☐ No ☒		Total Containers:																	
Sample Custody Seals:				Yes ☐ No ☒																			
Sample Identification				Matrix		Date Sampled		Time Sampled		Depth												Sample Comments	
Levey Well				GW		6-23-23		1000		-													
												7										24hr	
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Circle Method(s) and Metal(s) to be analyzed	200.8 / 6020:	200.7 / 6010	Total
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
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

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 		6/23/23	2		
3 		1454	4		
5			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29966-1

SDG Number: Hobbs NM

Login Number: 29966

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29966-1

SDG Number: Hobbs NM

Login Number: 29966

List Number: 2

Creator: Pena, Jesiel

List Source: Eurofins Houston

List Creation: 06/24/23 01:34 PM

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



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/30/2023 2:23:40 PM

JOB DESCRIPTION

Levey Well Hobbs, NM - 03B1417001
SDG NUMBER Hobbs NM

JOB NUMBER

880-30042-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/30/2023 2:23:40 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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

Laboratory Job ID: 880-30042-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-30042-1
SDG: Hobbs NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high 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.

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 880-30042-1
SDG: Hobbs NM

Job ID: 880-30042-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-30042-1**

Receipt

The sample was received on 6/27/2023 10:13 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) associated with batch 860-109976 recovered above the upper control limit for 1,2,4-Trichlorobenzene and Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 860-109976/2).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 860-109976 recovered outside control limits for the following analytes: 1,2,3-Trichlorobenzene, Naphthalene and 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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 instrument blank/CCB for analytical batch 860-109981 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFMS: The method blank for analytical batch 860-109982 contained Nitrite as N above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

Metals

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

General Chemistry

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

Client Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-30042-1

Date Collected: 06/26/23 12:10

Matrix: Water

Date Received: 06/27/23 10:13

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00257		0.00100	0.000460 mg/L			06/28/23 19:36	1
Bromobenzene	<0.000665 U		0.00100	0.000665 mg/L			06/28/23 19:36	1
Bromochloromethane	<0.000657 U		0.00100	0.000657 mg/L			06/28/23 19:36	1
Bromodichloromethane	<0.000552 U		0.00100	0.000552 mg/L			06/28/23 19:36	1
Bromoform	<0.000633 U		0.00500	0.000633 mg/L			06/28/23 19:36	1
Bromomethane	<0.00142 U		0.00500	0.00142 mg/L			06/28/23 19:36	1
2-Butanone	<0.00828 U		0.0500	0.00828 mg/L			06/28/23 19:36	1
Carbon tetrachloride	<0.000896 U		0.00500	0.000896 mg/L			06/28/23 19:36	1
Chlorobenzene	<0.000530 U		0.00100	0.000530 mg/L			06/28/23 19:36	1
Chloroethane	<0.00198 U		0.0100	0.00198 mg/L			06/28/23 19:36	1
Chloroform	<0.000643 U		0.00100	0.000643 mg/L			06/28/23 19:36	1
Chloromethane	<0.00204 U		0.0100	0.00204 mg/L			06/28/23 19:36	1
2-Chlorotoluene	<0.00118 U		0.00200	0.00118 mg/L			06/28/23 19:36	1
4-Chlorotoluene	<0.000472 U		0.00100	0.000472 mg/L			06/28/23 19:36	1
cis-1,2-Dichloroethene	<0.000714 U		0.00100	0.000714 mg/L			06/28/23 19:36	1
cis-1,3-Dichloropropene	<0.00107 U		0.00500	0.00107 mg/L			06/28/23 19:36	1
Dibromochloromethane	<0.000547 U		0.00500	0.000547 mg/L			06/28/23 19:36	1
1,2-Dibromo-3-Chloropropane	<0.00127 U *		0.00500	0.00127 mg/L			06/28/23 19:36	1
1,2-Dibromoethane	<0.000999 U		0.00500	0.000999 mg/L			06/28/23 19:36	1
1,2-Dichlorobenzene	<0.000509 U		0.00100	0.000509 mg/L			06/28/23 19:36	1
1,3-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			06/28/23 19:36	1
1,4-Dichlorobenzene	<0.000513 U		0.00100	0.000513 mg/L			06/28/23 19:36	1
Dichlorodifluoromethane	<0.000919 U		0.00100	0.000919 mg/L			06/28/23 19:36	1
1,1-Dichloroethane	<0.000635 U		0.00100	0.000635 mg/L			06/28/23 19:36	1
1,2-Dichloroethane	<0.000590 U		0.00100	0.000590 mg/L			06/28/23 19:36	1
1,1-Dichloroethene	<0.000738 U		0.00100	0.000738 mg/L			06/28/23 19:36	1
1,2-Dichloropropane	<0.000667 U		0.00500	0.000667 mg/L			06/28/23 19:36	1
1,3-Dichloropropane	<0.000514 U		0.00500	0.000514 mg/L			06/28/23 19:36	1
2,2-Dichloropropane	<0.000780 U		0.00500	0.000780 mg/L			06/28/23 19:36	1
1,1-Dichloropropene	<0.00160 U		0.00500	0.00160 mg/L			06/28/23 19:36	1
Ethylbenzene	0.00872		0.00100	0.000411 mg/L			06/28/23 19:36	1
Hexachlorobutadiene	<0.00126 U		0.00500	0.00126 mg/L			06/28/23 19:36	1
Isopropylbenzene	0.00406		0.00100	0.000613 mg/L			06/28/23 19:36	1
Methylene Chloride	<0.00173 U		0.00500	0.00173 mg/L			06/28/23 19:36	1
m,p-Xylenes	0.0356		0.0100	0.00124 mg/L			06/28/23 19:36	1
MTBE	<0.00139 U		0.00500	0.00139 mg/L			06/28/23 19:36	1
Naphthalene	<0.00135 U *		0.0100	0.00135 mg/L			06/28/23 19:36	1
n-Butylbenzene	<0.000644 U		0.00100	0.000644 mg/L			06/28/23 19:36	1
N-Propylbenzene	0.00199		0.00100	0.000498 mg/L			06/28/23 19:36	1
o-Xylene	0.00591		0.00100	0.000551 mg/L			06/28/23 19:36	1
p-Cymene (p-Isopropyltoluene)	<0.000919 U		0.00100	0.000919 mg/L			06/28/23 19:36	1
sec-Butylbenzene	<0.000468 U		0.00100	0.000468 mg/L			06/28/23 19:36	1
Styrene	<0.000655 U		0.00100	0.000655 mg/L			06/28/23 19:36	1
tert-Butylbenzene	<0.000442 U		0.00100	0.000442 mg/L			06/28/23 19:36	1
1,1,1,2-Tetrachloroethane	<0.000644 U		0.00100	0.000644 mg/L			06/28/23 19:36	1
1,1,2,2-Tetrachloroethane	<0.000470 U		0.00100	0.000470 mg/L			06/28/23 19:36	1
Tetrachloroethene	<0.000801 U		0.00100	0.000801 mg/L			06/28/23 19:36	1
Toluene	0.0177		0.00100	0.000475 mg/L			06/28/23 19:36	1
trans-1,2-Dichloroethene	<0.000945 U		0.00100	0.000945 mg/L			06/28/23 19:36	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-30042-1
Date Collected: 06/26/23 12:10 Matrix: Water
Date Received: 06/27/23 10:13

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/28/23 19:36	1
1,2,3-Trichlorobenzene	<0.00217	U **	0.00500	0.00217 mg/L			06/28/23 19:36	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/28/23 19:36	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/28/23 19:36	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/28/23 19:36	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/28/23 19:36	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/28/23 19:36	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/28/23 19:36	1
1,2,4-Trimethylbenzene	0.00922		0.00100	0.000417 mg/L			06/28/23 19:36	1
1,3,5-Trimethylbenzene	0.00261		0.00100	0.000456 mg/L			06/28/23 19:36	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/28/23 19:36	1
Xylenes, Total	0.0415		0.0100	0.00124 mg/L			06/28/23 19:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		74 - 124				06/28/23 19:36	1
Dibromofluoromethane (Surr)	100		75 - 131				06/28/23 19:36	1
1,2-Dichloroethane-d4 (Surr)	102		63 - 144				06/28/23 19:36	1
Toluene-d8 (Surr)	101		80 - 120				06/28/23 19:36	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.327	J	0.500	0.0711 mg/L			06/28/23 11:16	1
Nitrate as N	0.0682	J	0.100	0.0391 mg/L			06/28/23 11:16	1
Chloride	218		0.500	0.250 mg/L			06/28/23 11:16	1
Nitrite as N	2.51	B	0.100	0.0293 mg/L			06/28/23 11:16	1
Fluoride	0.301	J	0.500	0.100 mg/L			06/28/23 11:16	1
Sulfate	45.0		0.500	0.200 mg/L			06/28/23 11:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	260		10.0	5.76 mg/L		06/29/23 11:30	06/30/23 00:03	50
Magnesium	42.3		0.200	0.0428 mg/L		06/29/23 11:30	06/29/23 23:45	1
Potassium	3.70		0.500	0.0914 mg/L		06/29/23 11:30	06/29/23 23:45	1
Sodium	69.4		0.500	0.152 mg/L		06/29/23 11:30	06/29/23 23:45	1
SiO2	53.5		1.07	0.471 mg/L		06/29/23 11:30	06/29/23 23:45	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	-8.99			%			06/30/23 15:11	1
Alkalinity (SM 2320B)	719		4.00	4.00 mg/L			06/28/23 16:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	719		4.00	4.00 mg/L			06/28/23 16:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/28/23 16:17	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/28/23 16:17	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/28/23 16:17	1
Total Dissolved Solids (SM 2540C)	1180		10.0	10.0 mg/L			06/28/23 13:09	1
pH (SM 4500 H+ B)	6.5	HF		SU			06/28/23 15:52	1
Temperature (SM 4500 H+ B)	22.1	HF		Degrees C			06/28/23 15:52	1

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Surrogate Summary

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

Job ID: 880-30042-1
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)	(80-120)
880-30042-1	Levey Well	93	100	102	101
LCS 860-109976/3	Lab Control Sample	101	101	101	101
LCSD 860-109976/4	Lab Control Sample Dup	103	108	100	102
MB 860-109976/10	Method Blank	102	102	103	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: 880-30042-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-109976/10

Matrix: Water

Analysis Batch: 109976

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/28/23 16:04	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/28/23 16:04	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/28/23 16:04	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/28/23 16:04	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/28/23 16:04	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/28/23 16:04	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/28/23 16:04	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/28/23 16:04	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/28/23 16:04	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/28/23 16:04	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/28/23 16:04	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/28/23 16:04	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/28/23 16:04	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/28/23 16:04	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/28/23 16:04	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/28/23 16:04	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/28/23 16:04	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/28/23 16:04	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/28/23 16:04	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/28/23 16:04	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 16:04	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 16:04	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/28/23 16:04	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/28/23 16:04	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/28/23 16:04	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/28/23 16:04	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/28/23 16:04	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/28/23 16:04	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/28/23 16:04	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/28/23 16:04	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/28/23 16:04	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/28/23 16:04	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/28/23 16:04	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/28/23 16:04	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/28/23 16:04	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/28/23 16:04	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/28/23 16:04	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 16:04	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/28/23 16:04	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/28/23 16:04	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/28/23 16:04	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/28/23 16:04	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/28/23 16:04	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/28/23 16:04	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 16:04	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/28/23 16:04	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/28/23 16:04	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/28/23 16:04	1

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QC Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-109976/10

Matrix: Water

Analysis Batch: 109976

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			06/28/23 16:04	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/28/23 16:04	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/28/23 16:04	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/28/23 16:04	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/28/23 16:04	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/28/23 16:04	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/28/23 16:04	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/28/23 16:04	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/28/23 16:04	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/28/23 16:04	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/28/23 16:04	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/28/23 16:04	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/28/23 16:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		06/28/23 16:04	1
Dibromofluoromethane (Surr)	102		75 - 131		06/28/23 16:04	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		06/28/23 16:04	1
Toluene-d8 (Surr)	102		80 - 120		06/28/23 16:04	1

Lab Sample ID: LCS 860-109976/3

Matrix: Water

Analysis Batch: 109976

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	0.05460		mg/L		109	75 - 125
Bromobenzene	0.0500	0.05549		mg/L		111	75 - 125
Bromochloromethane	0.0500	0.05531		mg/L		111	60 - 140
Bromodichloromethane	0.0500	0.05296		mg/L		106	75 - 125
Bromoform	0.0500	0.05464		mg/L		109	70 - 130
Bromomethane	0.0500	0.04294		mg/L		86	60 - 140
2-Butanone	0.250	0.2474		mg/L		99	60 - 140
Carbon tetrachloride	0.0500	0.05286		mg/L		106	70 - 130
Chlorobenzene	0.0500	0.05463		mg/L		109	65 - 135
Chloroethane	0.0500	0.04538		mg/L		91	60 - 140
Chloroform	0.0500	0.05477		mg/L		110	70 - 121
Chloromethane	0.0500	0.04533		mg/L		91	60 - 140
2-Chlorotoluene	0.0500	0.05698		mg/L		114	73 - 125
4-Chlorotoluene	0.0500	0.05513		mg/L		110	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05433		mg/L		109	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05481		mg/L		110	74 - 125
Dibromochloromethane	0.0500	0.05288		mg/L		106	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.06277	*+	mg/L		126	59 - 125
1,2-Dibromoethane	0.0500	0.05397		mg/L		108	73 - 125
1,2-Dichlorobenzene	0.0500	0.05700		mg/L		114	75 - 125
1,3-Dichlorobenzene	0.0500	0.05776		mg/L		116	75 - 125
1,4-Dichlorobenzene	0.0500	0.05641		mg/L		113	75 - 125
Dichlorodifluoromethane	0.0500	0.04639		mg/L		93	50 - 150

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QC Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-109976/3				Client Sample ID: Lab Control Sample			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 109976							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	0.0500	0.05453		mg/L		109	70 - 130
1,2-Dichloroethane	0.0500	0.05505		mg/L		110	72 - 130
1,1-Dichloroethene	0.0500	0.05378		mg/L		108	50 - 150
1,2-Dichloropropane	0.0500	0.05480		mg/L		110	74 - 125
1,3-Dichloropropane	0.0500	0.05362		mg/L		107	75 - 125
2,2-Dichloropropane	0.0500	0.05192		mg/L		104	75 - 125
1,1-Dichloropropene	0.0500	0.05580		mg/L		112	75 - 125
Ethylbenzene	0.0500	0.05510		mg/L		110	75 - 125
Hexachlorobutadiene	0.0500	0.05775		mg/L		115	75 - 125
Isopropylbenzene	0.0500	0.05556		mg/L		111	75 - 125
Methylene Chloride	0.0500	0.04973		mg/L		99	71 - 125
m,p-Xylenes	0.0500	0.05641		mg/L		113	75 - 125
MTBE	0.0500	0.05344		mg/L		107	65 - 135
Naphthalene	0.0500	0.07472	*+	mg/L		149	70 - 130
n-Butylbenzene	0.0500	0.05770		mg/L		115	75 - 125
N-Propylbenzene	0.0500	0.05771		mg/L		115	75 - 125
o-Xylene	0.0500	0.05556		mg/L		111	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05786		mg/L		116	75 - 125
sec-Butylbenzene	0.0500	0.05700		mg/L		114	75 - 125
Styrene	0.0500	0.05677		mg/L		114	75 - 125
tert-Butylbenzene	0.0500	0.05705		mg/L		114	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05415		mg/L		108	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05657		mg/L		113	74 - 125
Tetrachloroethene	0.0500	0.05485		mg/L		110	71 - 125
Toluene	0.0500	0.05383		mg/L		108	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05401		mg/L		108	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05447		mg/L		109	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.07036	*+	mg/L		141	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.06448		mg/L		129	75 - 135
1,1,1-Trichloroethane	0.0500	0.05381		mg/L		108	70 - 130
1,1,2-Trichloroethane	0.0500	0.05342		mg/L		107	70 - 130
Trichloroethene	0.0500	0.05391		mg/L		108	75 - 135
Trichlorofluoromethane	0.0500	0.04854		mg/L		97	60 - 140
1,2,3-Trichloropropane	0.0500	0.05635		mg/L		113	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05785		mg/L		116	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05654		mg/L		113	60 - 140
Vinyl chloride	0.0500	0.04514		mg/L		90	60 - 140
		LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	101		74 - 124				
Dibromofluoromethane (Surr)	101		75 - 131				
1,2-Dichloroethane-d4 (Surr)	101		63 - 144				
Toluene-d8 (Surr)	101		80 - 120				

QC Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-109976/4

Matrix: Water

Analysis Batch: 109976

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	0.05085		mg/L		102	75 - 125	7	25
Bromobenzene	0.0500	0.05376		mg/L		108	75 - 125	3	25
Bromochloromethane	0.0500	0.05655		mg/L		113	60 - 140	2	25
Bromodichloromethane	0.0500	0.04850		mg/L		97	75 - 125	9	25
Bromoform	0.0500	0.05151		mg/L		103	70 - 130	6	25
Bromomethane	0.0500	0.04536		mg/L		91	60 - 140	5	25
2-Butanone	0.250	0.2601		mg/L		104	60 - 140	5	25
Carbon tetrachloride	0.0500	0.05423		mg/L		108	70 - 130	3	25
Chlorobenzene	0.0500	0.05171		mg/L		103	65 - 135	5	25
Chloroethane	0.0500	0.04958		mg/L		99	60 - 140	9	25
Chloroform	0.0500	0.05577		mg/L		112	70 - 121	2	25
Chloromethane	0.0500	0.04804		mg/L		96	60 - 140	6	25
2-Chlorotoluene	0.0500	0.05266		mg/L		105	73 - 125	8	25
4-Chlorotoluene	0.0500	0.05334		mg/L		107	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.05568		mg/L		111	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05066		mg/L		101	74 - 125	8	25
Dibromochloromethane	0.0500	0.05022		mg/L		100	73 - 125	5	25
1,2-Dibromo-3-Chloropropane	0.0500	0.06277	*+	mg/L		126	59 - 125	0	25
1,2-Dibromoethane	0.0500	0.05129		mg/L		103	73 - 125	5	25
1,2-Dichlorobenzene	0.0500	0.05615		mg/L		112	75 - 125	2	25
1,3-Dichlorobenzene	0.0500	0.05608		mg/L		112	75 - 125	3	25
1,4-Dichlorobenzene	0.0500	0.05503		mg/L		110	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.04870		mg/L		97	50 - 150	5	25
1,1-Dichloroethane	0.0500	0.05529		mg/L		111	70 - 130	1	25
1,2-Dichloroethane	0.0500	0.05014		mg/L		100	72 - 130	9	25
1,1-Dichloroethene	0.0500	0.05484		mg/L		110	50 - 150	2	25
1,2-Dichloropropane	0.0500	0.05013		mg/L		100	74 - 125	9	25
1,3-Dichloropropane	0.0500	0.05107		mg/L		102	75 - 125	5	25
2,2-Dichloropropane	0.0500	0.05509		mg/L		110	75 - 125	6	25
1,1-Dichloropropene	0.0500	0.05717		mg/L		114	75 - 125	2	25
Ethylbenzene	0.0500	0.05288		mg/L		106	75 - 125	4	25
Hexachlorobutadiene	0.0500	0.05826		mg/L		117	75 - 125	1	25
Isopropylbenzene	0.0500	0.05383		mg/L		108	75 - 125	3	25
Methylene Chloride	0.0500	0.05063		mg/L		101	71 - 125	2	25
m,p-Xylenes	0.0500	0.05332		mg/L		107	75 - 125	6	25
MTBE	0.0500	0.05509		mg/L		110	65 - 135	3	25
Naphthalene	0.0500	0.07814	*+	mg/L		156	70 - 130	4	25
n-Butylbenzene	0.0500	0.05729		mg/L		115	75 - 125	1	25
N-Propylbenzene	0.0500	0.05637		mg/L		113	75 - 125	2	25
o-Xylene	0.0500	0.05294		mg/L		106	75 - 125	5	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05693		mg/L		114	75 - 125	2	25
sec-Butylbenzene	0.0500	0.05604		mg/L		112	75 - 125	2	25
Styrene	0.0500	0.05377		mg/L		108	75 - 125	5	25
tert-Butylbenzene	0.0500	0.05645		mg/L		113	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.05100		mg/L		102	72 - 125	6	25
1,1,2,2-Tetrachloroethane	0.0500	0.05566		mg/L		111	74 - 125	2	25
Tetrachloroethene	0.0500	0.05172		mg/L		103	71 - 125	6	25
Toluene	0.0500	0.05127		mg/L		103	70 - 130	5	25

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QC Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-109976/4

Matrix: Water

Analysis Batch: 109976

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	0.05463		mg/L		109	75 - 125	1	25
trans-1,3-Dichloropropene	0.0500	0.05215		mg/L		104	66 - 125	4	25
1,2,3-Trichlorobenzene	0.0500	0.07299	*+	mg/L		146	75 - 137	4	25
1,2,4-Trichlorobenzene	0.0500	0.06507		mg/L		130	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.05429		mg/L		109	70 - 130	1	25
1,1,2-Trichloroethane	0.0500	0.05119		mg/L		102	70 - 130	4	25
Trichloroethene	0.0500	0.04901		mg/L		98	75 - 135	10	25
Trichlorofluoromethane	0.0500	0.05375		mg/L		107	60 - 140	10	25
1,2,3-Trichloropropane	0.0500	0.05661		mg/L		113	75 - 125	0	25
1,2,4-Trimethylbenzene	0.0500	0.05714		mg/L		114	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.04989		mg/L		100	60 - 140	13	25
Vinyl chloride	0.0500	0.04973		mg/L		99	60 - 140	10	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	108		75 - 131
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
Toluene-d8 (Surr)	102		80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-109981/7

Matrix: Water

Analysis Batch: 109981

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			06/28/23 11:26	1
Chloride	<0.250	U	0.500	0.250 mg/L			06/28/23 11:26	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/28/23 11:26	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/28/23 11:26	1

Lab Sample ID: LCS 860-109981/8

Matrix: Water

Analysis Batch: 109981

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	9.472		mg/L		95	90 - 110
Chloride	10.0	9.656		mg/L		97	90 - 110
Fluoride	10.0	10.03		mg/L		100	90 - 110
Sulfate	10.0	9.465		mg/L		95	90 - 110

Lab Sample ID: LCSD 860-109981/9

Matrix: Water

Analysis Batch: 109981

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	9.544		mg/L		95	90 - 110	1	20
Chloride	10.0	9.742		mg/L		97	90 - 110	1	20
Fluoride	10.0	10.10		mg/L		101	90 - 110	1	20

Eurofins Midland

QC Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-109981/9

Matrix: Water

Analysis Batch: 109981

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	9.566		mg/L		96	90 - 110	1	20

Lab Sample ID: LLCS 860-109981/11

Matrix: Water

Analysis Batch: 109981

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	0.4226	J	mg/L		85	50 - 150		
Chloride	0.500	0.4797	J	mg/L		96	50 - 150		
Fluoride	0.500	0.3520	J	mg/L		70	50 - 150		
Sulfate	0.500	0.3903	J	mg/L		78	50 - 150		

Lab Sample ID: MB 860-109982/7

Matrix: Water

Analysis Batch: 109982

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			06/28/23 11:26	1
Nitrite as N	0.06279	J	0.100	0.0293 mg/L			06/28/23 11:26	1

Lab Sample ID: LCS 860-109982/8

Matrix: Water

Analysis Batch: 109982

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	9.789		mg/L		98	80 - 120		
Nitrite as N	10.0	9.728		mg/L		97	80 - 120		

Lab Sample ID: LCSD 860-109982/9

Matrix: Water

Analysis Batch: 109982

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	9.878		mg/L		99	80 - 120	1	20
Nitrite as N	10.0	9.845		mg/L		98	80 - 120	1	20

Lab Sample ID: LLCS 860-109982/10

Matrix: Water

Analysis Batch: 109982

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	0.09222	J	mg/L		92	50 - 150		
Nitrite as N	0.100	0.06754	J	mg/L		68	50 - 150		

Eurofins Midland

QC Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-110225/1-A

Matrix: Water

Analysis Batch: 110386

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 110225

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.115	U	0.200	0.115 mg/L		06/29/23 11:30	06/29/23 20:10	1
Magnesium	<0.0428	U	0.200	0.0428 mg/L		06/29/23 11:30	06/29/23 20:10	1
Potassium	<0.0914	U	0.500	0.0914 mg/L		06/29/23 11:30	06/29/23 20:10	1
Sodium	<0.152	U	0.500	0.152 mg/L		06/29/23 11:30	06/29/23 20:10	1
SiO2	<0.471	U	1.07	0.471 mg/L		06/29/23 11:30	06/29/23 20:10	1

Lab Sample ID: LCS 860-110225/2-A

Matrix: Water

Analysis Batch: 110386

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 110225

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	24.10		mg/L		96	85 - 115
Magnesium	25.0	23.10		mg/L		92	85 - 115
Potassium	10.0	9.610		mg/L		96	85 - 115
Sodium	25.0	24.10		mg/L		96	85 - 115
SiO2	21.4	20.52		mg/L		96	85 - 115

Lab Sample ID: LCSD 860-110225/3-A

Matrix: Water

Analysis Batch: 110386

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 110225

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	24.20		mg/L		97	85 - 115	0	20
Magnesium	25.0	23.30		mg/L		93	85 - 115	1	20
Potassium	10.0	9.730		mg/L		97	85 - 115	1	20
Sodium	25.0	24.20		mg/L		97	85 - 115	0	20
SiO2	21.4	20.65		mg/L		97	85 - 115	1	20

Lab Sample ID: LLCS 860-110225/4-A

Matrix: Water

Analysis Batch: 110386

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 110225

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.200	0.1950	J	mg/L		98	50 - 150
Magnesium	0.200	0.1660	J	mg/L		83	50 - 150
Potassium	0.500	0.4390	J	mg/L		88	50 - 150
Sodium	0.500	0.4140	J	mg/L		83	50 - 150
SiO2	1.07	0.9609	J	mg/L		90	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-110074/3

Matrix: Water

Analysis Batch: 110074

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			06/28/23 12:07	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/28/23 12:07	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/28/23 12:07	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			06/28/23 12:07	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-30042-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 860-110074/3

Matrix: Water

Analysis Batch: 110074

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			06/28/23 12:07	1

Lab Sample ID: LCS 860-110074/4

Matrix: Water

Analysis Batch: 110074

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	251.3		mg/L		101	85 - 115

Lab Sample ID: LCSD 860-110074/5

Matrix: Water

Analysis Batch: 110074

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	250.2		mg/L		100	85 - 115	0	20

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

Lab Sample ID: MB 860-110018/1

Matrix: Water

Analysis Batch: 110018

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			06/28/23 13:09	1

Lab Sample ID: LCS 860-110018/2

Matrix: Water

Analysis Batch: 110018

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	1011		mg/L		101	80 - 120

Lab Sample ID: LCSD 860-110018/3

Matrix: Water

Analysis Batch: 110018

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	1009		mg/L		101	80 - 120	0	10

Lab Sample ID: LLCS 860-110018/4

Matrix: Water

Analysis Batch: 110018

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	5.00	6.000		mg/L		120	50 - 150

Eurofins Midland

QC Association Summary

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

Job ID: 880-30042-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 109976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total/NA	Water	8260C	
MB 860-109976/10	Method Blank	Total/NA	Water	8260C	
LCS 860-109976/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-109976/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 109981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total/NA	Water	300.0	
MB 860-109981/7	Method Blank	Total/NA	Water	300.0	
LCS 860-109981/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109981/9	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-109981/11	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 109982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total/NA	Water	300.0	
MB 860-109982/7	Method Blank	Total/NA	Water	300.0	
LCS 860-109982/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109982/9	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-109982/10	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 110225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-110225/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-110225/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-110225/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
LLCS 860-110225/4-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 110386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	110225
880-30042-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	110225
MB 860-110225/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	110225
LCS 860-110225/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	110225
LCSD 860-110225/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	110225
LLCS 860-110225/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	110225

General Chemistry

Analysis Batch: 110018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-110018/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-110018/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-110018/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LLCS 860-110018/4	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins Midland

QC Association Summary

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

Job ID: 880-30042-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 110074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-110074/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-110074/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-110074/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 110075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 110498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30042-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-30042-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-30042-1

Date Collected: 06/26/23 12:10

Matrix: Water

Date Received: 06/27/23 10:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	109976	AN	EET HOU	06/28/23 19:36
Total/NA	Analysis	300.0		1	109981	RBNS	EET HOU	06/28/23 11:16
Total/NA	Analysis	300.0		1	109982	RBNS	EET HOU	06/28/23 11:16
Total Recoverable	Prep	200.7			110225	MD	EET HOU	06/29/23 11:30
Total Recoverable	Analysis	200.7 Rev 4.4		1	110386	JDM	EET HOU	06/29/23 23:45
Total Recoverable	Prep	200.7			110225	MD	EET HOU	06/29/23 11:30
Total Recoverable	Analysis	200.7 Rev 4.4		50	110386	JDM	EET HOU	06/30/23 00:03
Total/NA	Analysis	SM 1030E		1	110498	MC	EET HOU	06/30/23 15:11
Total/NA	Analysis	SM 2320B		1	110074	TL	EET HOU	06/28/23 16:17
Total/NA	Analysis	SM 2540C		1	110018	OH	EET HOU	06/28/23 13:09
Total/NA	Analysis	SM 4500 H+ B		1	110075	TL	EET HOU	06/28/23 15:52

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: 880-30042-1
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	T104704215-23-50	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
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: 880-30042-1
SDG: Hobbs NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	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
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

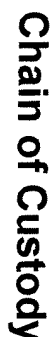
Sample Summary

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

Job ID: 880-30042-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-30042-1	Levey Well	Water	06/26/23 12:10	06/27/23 10:13

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



Work Order No: 36042

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Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

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

Deliverables EDD ☐ ADaPT ☐ Other ☐

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C).	040.1				Thermometer ID		
Received intact:	Yes	No					
Cooler Custody Seals	Yes	No	(N/A)		Correction Factor		-30
Sample Custody Seals.	Yes	No	(N/A)		Total Containers.		

[illegible]

880-30042 Chain of Custody

Total	200.7 / 6010	200.8 / 6020:	
Circle Method(s) and Metal(s) to be analyzed	8RCRA	13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
	TCLP / SPLP 6010	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
			1631 / 245.1 / 7470 / 7471 Hg

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 		6/27/23	2		
2		10/3	4		
3			5		
4			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-30042-1

SDG Number: Hobbs NM

Login Number: 30042

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-30042-1

SDG Number: Hobbs NM

Login Number: 30042

List Number: 2

Creator: Canadilla, Surelis

List Source: Eurofins Houston

List Creation: 06/28/23 10:10 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?	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	



ANALYTICAL REPORT

June 19, 2023

Ensolum, LLC

Sample Delivery Group: L1626392
Samples Received: 06/15/2023
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

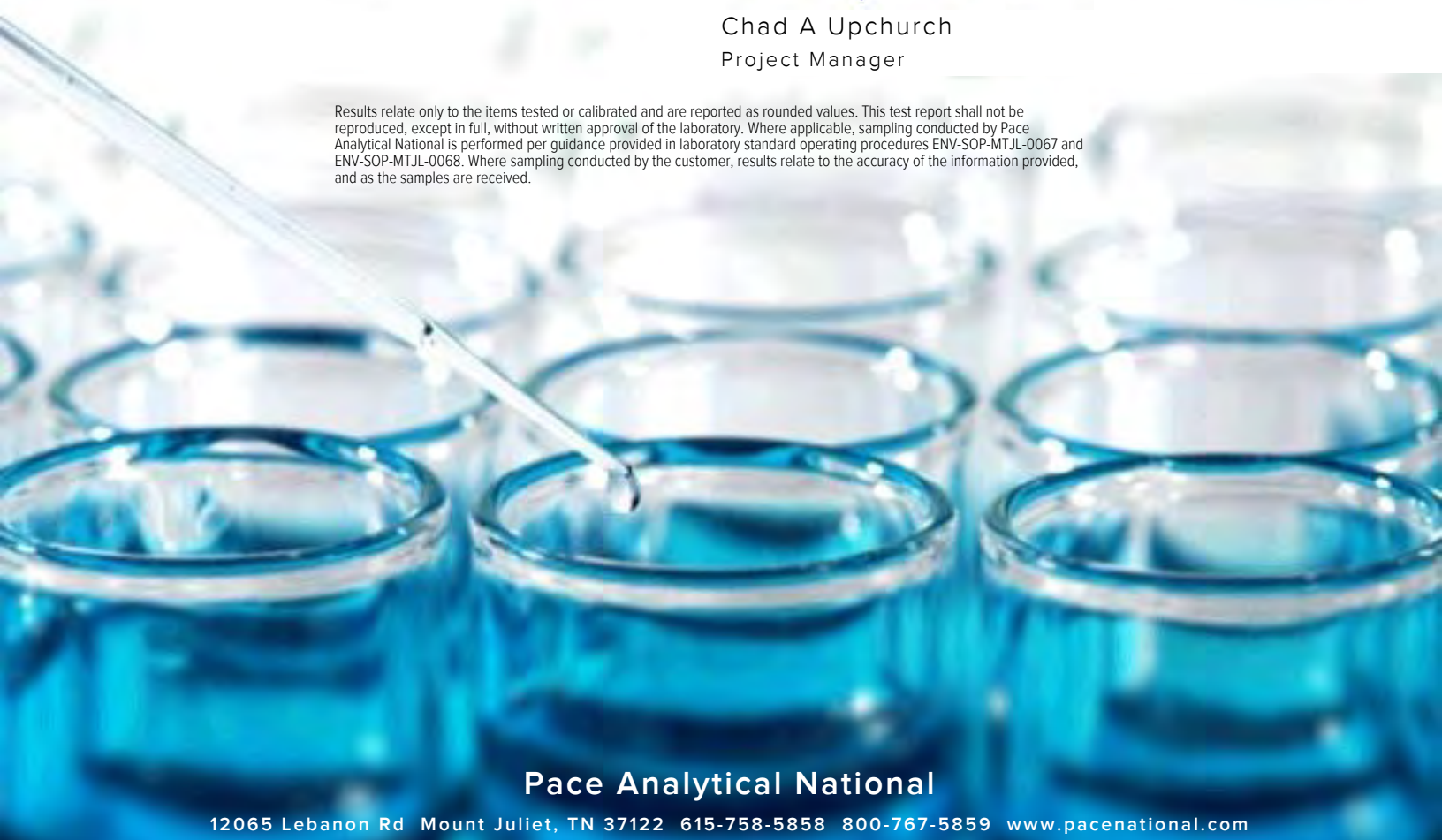


Entire Report Reviewed By:

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

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Cn: Case Narrative	4	
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		¹⁰ Sc

LEVEY WELL L1626392-01 Air

Collected by
Shane Diller

Collected date/time
06/09/23 12:00

Received date/time
06/15/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2079151	100	06/16/23 23:08	06/16/23 23:08	DBB	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2079863	2000	06/18/23 17:09	06/18/23 17:09	MBF	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.



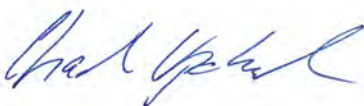
Chad A Upchurch
Project Manager

- 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: 06/19/2023 09:52					
Project Name: Levey Well		Laboratory Job Number: L1626392-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2079151 and WG2079863					
# 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: 06/19/2023 09:52					
Project Name: Levey Well		Laboratory Job Number: L1626392-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2079151 and WG2079863					
# 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: 06/19/2023 09:52	
Project Name: Levey Well		Laboratory Job Number: L1626392-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2079151 and WG2079863	
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: 06/09/23 12:00

L1626392

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	862	2050		100	WG2079151
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG2079151
Benzene	71-43-2	78.10	20.0	63.9	33.2	106		100	WG2079151
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG2079151
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG2079151
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG2079151
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG2079151
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG2079151
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG2079151
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG2079151
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG2079151
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG2079151
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG2079151
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG2079151
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG2079151
Cyclohexane	110-82-7	84.20	20.0	68.9	ND	ND		100	WG2079151
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG2079151
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG2079151
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG2079151
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG2079151
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG2079151
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG2079151
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG2079151
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG2079151
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG2079151
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG2079151
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG2079151
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG2079151
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG2079151
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG2079151
Ethanol	64-17-5	46.10	250	471	871	1640		100	WG2079151
Ethylbenzene	100-41-4	106	20.0	86.7	81.8	355		100	WG2079151
4-Ethyltoluene	622-96-8	120	20.0	98.2	ND	ND		100	WG2079151
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG2079151
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG2079151
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG2079151
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG2079151
Heptane	142-82-5	100	20.0	81.8	449	1840		100	WG2079151
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG2079151
n-Hexane	110-54-3	86.20	1260	4440	28600	101000		2000	WG2079863
Isopropylbenzene	98-82-8	120.20	20.0	98.3	ND	ND		100	WG2079151
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG2079151
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG2079151
2-Butanone (MEK)	78-93-3	72.10	125	369	ND	ND		100	WG2079151
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG2079151
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG2079151
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG2079151
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG2079151
2-Propanol	67-63-0	60.10	125	307	6640	16300		100	WG2079151
Propene	115-07-1	42.10	125	215	ND	ND		100	WG2079151
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG2079151
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG2079151
Tetrachloroethylene	127-18-4	166	20.0	136	25.1	170		100	WG2079151
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG2079151
Toluene	108-88-3	92.10	50.0	188	316	1190		100	WG2079151
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG2079151

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 06/09/23 12:00

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	WG2079151
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG2079151
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG2079151
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	293	1440		100	WG2079151
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	126	618		100	WG2079151
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG2079151
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG2079151
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG2079151
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG2079151
m&p-Xylene	1330-20-7	106	40.0	173	704	3050		100	WG2079151
o-Xylene	95-47-6	106	20.0	86.7	342	1480		100	WG2079151
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	41300	171000		100	WG2079151
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG2079151
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		90.9				WG2079863

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3937689-3 06/16/23 12:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	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	0.831	U	0.265	2.50
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

Method Blank (MB)

(MB) R3937689-3 06/16/23 12:07

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	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	105			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3937689-1 06/16/23 10:50 • (LCSD) R3937689-2 06/16/23 11:29

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	3.93	3.96	105	106	70.0-130			0.760	25
Allyl chloride	3.75	3.52	3.69	93.9	98.4	70.0-130			4.72	25
Benzene	3.75	3.81	3.79	102	101	70.0-130			0.526	25
Benzyl Chloride	3.75	4.52	4.54	121	121	70.0-152			0.442	25
Bromodichloromethane	3.75	3.94	3.90	105	104	70.0-130			1.02	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3937689-1 06/16/23 10:50 • (LCSD) R3937689-2 06/16/23 11:29

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	4.23	4.30	113	115	70.0-130			1.64	25
Bromomethane	3.75	3.81	3.75	102	100	70.0-130			1.59	25
1,3-Butadiene	3.75	3.94	3.62	105	96.5	70.0-130			8.47	25
Carbon disulfide	3.75	3.61	3.59	96.3	95.7	70.0-130			0.556	25
Carbon tetrachloride	3.75	4.09	4.05	109	108	70.0-130			0.983	25
Chlorobenzene	3.75	3.93	3.87	105	103	70.0-130			1.54	25
Chloroethane	3.75	3.49	3.34	93.1	89.1	70.0-130			4.39	25
Chloroform	3.75	3.90	3.86	104	103	70.0-130			1.03	25
Chloromethane	3.75	3.67	3.48	97.9	92.8	70.0-130			5.31	25
2-Chlorotoluene	3.75	4.33	4.34	115	116	70.0-130			0.231	25
Cyclohexane	3.75	3.88	3.77	103	101	70.0-130			2.88	25
Dibromochloromethane	3.75	3.93	3.92	105	105	70.0-130			0.255	25
1,2-Dibromoethane	3.75	3.90	3.85	104	103	70.0-130			1.29	25
1,2-Dichlorobenzene	3.75	4.38	4.38	117	117	70.0-130			0.000	25
1,3-Dichlorobenzene	3.75	4.44	4.46	118	119	70.0-130			0.449	25
1,4-Dichlorobenzene	3.75	4.51	4.57	120	122	70.0-130			1.32	25
1,2-Dichloroethane	3.75	4.03	3.93	107	105	70.0-130			2.51	25
1,1-Dichloroethane	3.75	3.83	3.73	102	99.5	70.0-130			2.65	25
1,1-Dichloroethene	3.75	3.88	3.78	103	101	70.0-130			2.61	25
cis-1,2-Dichloroethene	3.75	3.87	3.80	103	101	70.0-130			1.83	25
trans-1,2-Dichloroethene	3.75	3.81	3.67	102	97.9	70.0-130			3.74	25
1,2-Dichloropropane	3.75	3.81	3.76	102	100	70.0-130			1.32	25
cis-1,3-Dichloropropene	3.75	3.76	3.78	100	101	70.0-130			0.531	25
trans-1,3-Dichloropropene	3.75	3.88	3.78	103	101	70.0-130			2.61	25
1,4-Dioxane	3.75	3.57	3.47	95.2	92.5	70.0-140			2.84	25
Ethanol	3.75	4.08	4.00	109	107	55.0-148			1.98	25
Ethylbenzene	3.75	4.08	4.16	109	111	70.0-130			1.94	25
4-Ethyltoluene	3.75	4.35	4.39	116	117	70.0-130			0.915	25
Trichlorofluoromethane	3.75	4.03	3.90	107	104	70.0-130			3.28	25
Dichlorodifluoromethane	3.75	3.83	3.79	102	101	64.0-139			1.05	25
1,1,2-Trichlorotrifluoroethane	3.75	3.86	3.89	103	104	70.0-130			0.774	25
1,2-Dichlorotetrafluoroethane	3.75	3.99	3.87	106	103	70.0-130			3.05	25
Heptane	3.75	4.03	3.92	107	105	70.0-130			2.77	25
Hexachloro-1,3-butadiene	3.75	4.42	4.42	118	118	70.0-151			0.000	25
Isopropylbenzene	3.75	4.30	4.40	115	117	70.0-130			2.30	25
Methylene Chloride	3.75	3.74	3.62	99.7	96.5	70.0-130			3.26	25
Methyl Butyl Ketone	3.75	3.69	3.73	98.4	99.5	70.0-149			1.08	25
2-Butanone (MEK)	3.75	3.75	3.73	100	99.5	70.0-130			0.535	25
4-Methyl-2-pentanone (MIBK)	3.75	3.67	3.57	97.9	95.2	70.0-139			2.76	25
Methyl methacrylate	3.75	3.74	3.65	99.7	97.3	70.0-130			2.44	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3937689-1 06/16/23 10:50 • (LCSD) R3937689-2 06/16/23 11:29

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	3.92	3.84	105	102	70.0-130			2.06	25
Naphthalene	3.75	4.43	4.49	118	120	70.0-159			1.35	25
2-Propanol	3.75	3.88	3.86	103	103	70.0-139			0.517	25
Propene	3.75	3.80	3.75	101	100	64.0-144			1.32	25
Styrene	3.75	4.11	4.28	110	114	70.0-130			4.05	25
1,1,2,2-Tetrachloroethane	3.75	4.13	4.15	110	111	70.0-130			0.483	25
Tetrachloroethylene	3.75	3.97	3.95	106	105	70.0-130			0.505	25
Tetrahydrofuran	3.75	3.68	3.58	98.1	95.5	70.0-137			2.75	25
Toluene	3.75	3.82	3.79	102	101	70.0-130			0.788	25
1,2,4-Trichlorobenzene	3.75	4.37	4.38	117	117	70.0-160			0.229	25
1,1,1-Trichloroethane	3.75	3.94	3.90	105	104	70.0-130			1.02	25
1,1,2-Trichloroethane	3.75	3.73	3.71	99.5	98.9	70.0-130			0.538	25
Trichloroethylene	3.75	3.88	3.85	103	103	70.0-130			0.776	25
1,2,4-Trimethylbenzene	3.75	4.37	4.40	117	117	70.0-130			0.684	25
1,3,5-Trimethylbenzene	3.75	4.44	4.52	118	121	70.0-130			1.79	25
2,2,4-Trimethylpentane	3.75	3.99	3.88	106	103	70.0-130			2.80	25
Vinyl chloride	3.75	3.70	3.53	98.7	94.1	70.0-130			4.70	25
Vinyl Bromide	3.75	3.73	3.64	99.5	97.1	70.0-130			2.44	25
Vinyl acetate	3.75	3.91	3.82	104	102	70.0-130			2.33	25
m&p-Xylene	7.50	8.46	8.54	113	114	70.0-130			0.941	25
o-Xylene	3.75	4.18	4.25	111	113	70.0-130			1.66	25
TPH (GC/MS) Low Fraction	188	185	185	98.4	98.4	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				106	108	60.0-140				

¹Cp

²Tc

³Ss

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⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3938217-2 06/18/23 11:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	90.7			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3938217-1 06/18/23 09:18 • (LCSD) R3938217-3 06/18/23 11:39

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	4.11	4.08	110	109	70.0-130			0.733	25
(S) 1,4-Bromofluorobenzene				101	99.9	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

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

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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

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⁹Al

¹⁰Sc

Released to Imaging: 3/15/2024 3:23:00 PM



ANALYTICAL REPORT

June 27, 2023

Ensolum, LLC

Sample Delivery Group: L1627445
Samples Received: 06/19/2023
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

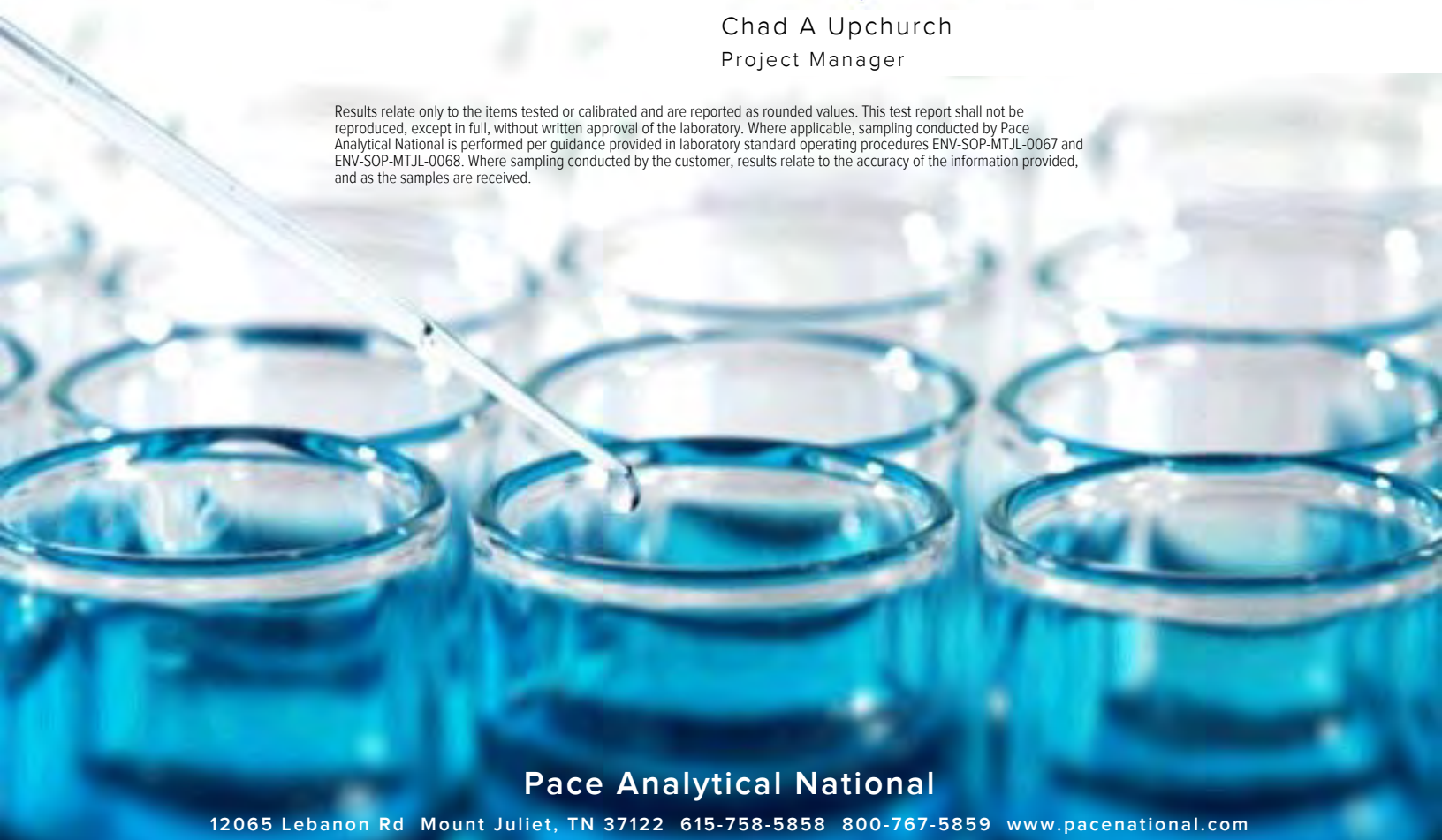


Entire Report Reviewed By:

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 L1627445-01	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 L1627445-01 Air

Collected by
Shane Diller

Collected date/time
06/15/23 12:27

Received date/time
06/19/23 09:20

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2082855	100	06/23/23 02:17	06/23/23 02:17	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2083774	2000	06/24/23 18:47	06/24/23 18:47	DBB	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2084545	20000	06/26/23 15:54	06/26/23 15:54	JAP	Mt. Juliet, TN

¹Cp

²Tc

³Ss

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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

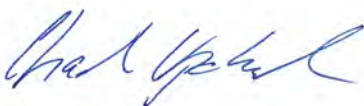
- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

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: 06/27/2023 09:04					
Project Name: Levey Well		Laboratory Job Number: L1627445-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2082855, WG2083774 and WG2084545					
# 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: 06/27/2023 09:04					
Project Name: Levey Well		Laboratory Job Number: L1627445-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2082855, WG2083774 and WG2084545					
# 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: 06/27/2023 09:04	
Project Name: Levey Well		Laboratory Job Number: L1627445-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2082855, WG2083774 and WG2084545	
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: 06/15/23 12:27

L1627445

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	WG2082855
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG2082855
Benzene	71-43-2	78.10	400	1280	ND	ND		2000	WG2083774
Benzyl Chloride	100-44-7	127	400	2080	ND	ND		2000	WG2083774
Bromodichloromethane	75-27-4	164	400	2680	ND	ND		2000	WG2083774
Bromoform	75-25-2	253	1200	12400	ND	ND		2000	WG2083774
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG2082855
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG2082855
Carbon disulfide	75-15-0	76.10	20.0	62.2	99.2	309		100	WG2082855
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG2082855
Chlorobenzene	108-90-7	113	400	1850	ND	ND		2000	WG2083774
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG2082855
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG2082855
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG2082855
2-Chlorotoluene	95-49-8	126	400	2060	ND	ND		2000	WG2083774
Cyclohexane	110-82-7	84.20	400	1380	29600	102000		2000	WG2083774
Dibromochloromethane	124-48-1	208	400	3400	ND	ND		2000	WG2083774
1,2-Dibromoethane	106-93-4	188	400	3080	ND	ND		2000	WG2083774
1,2-Dichlorobenzene	95-50-1	147	400	2400	ND	ND		2000	WG2083774
1,3-Dichlorobenzene	541-73-1	147	400	2400	ND	ND		2000	WG2083774
1,4-Dichlorobenzene	106-46-7	147	400	2400	ND	ND		2000	WG2083774
1,2-Dichloroethane	107-06-2	99	400	1620	ND	ND		2000	WG2083774
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG2082855
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG2082855
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG2082855
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG2082855
1,2-Dichloropropane	78-87-5	113	400	1850	ND	ND		2000	WG2083774
cis-1,3-Dichloropropene	10061-01-5	111	400	1820	ND	ND		2000	WG2083774
trans-1,3-Dichloropropene	10061-02-6	111	400	1820	ND	ND		2000	WG2083774
1,4-Dioxane	123-91-1	88.10	400	1440	ND	ND		2000	WG2083774
Ethanol	64-17-5	46.10	250	471	844	1590		100	WG2082855
Ethylbenzene	100-41-4	106	400	1730	ND	ND		2000	WG2083774
4-Ethyltoluene	622-96-8	120	400	1960	ND	ND		2000	WG2083774
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG2082855
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG2082855
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG2082855
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG2082855
Heptane	142-82-5	100	400	1640	24000	98200		2000	WG2083774
Hexachloro-1,3-butadiene	87-68-3	261	1260	13500	ND	ND		2000	WG2083774
n-Hexane	110-54-3	86.20	12600	44400	628000	2210000		20000	WG2084545
Isopropylbenzene	98-82-8	120.20	400	1970	ND	ND		2000	WG2083774
Methylene Chloride	75-09-2	84.90	20.0	69.4	26.6	92.4		100	WG2082855
Methyl Butyl Ketone	591-78-6	100	2500	10200	ND	ND		2000	WG2083774
2-Butanone (MEK)	78-93-3	72.10	125	369	ND	ND		100	WG2082855
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2500	10200	ND	ND		2000	WG2083774
Methyl methacrylate	80-62-6	100.12	400	1640	ND	ND		2000	WG2083774
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG2082855
Naphthalene	91-20-3	128	1260	6600	ND	ND		2000	WG2083774
2-Propanol	67-63-0	60.10	125	307	4100	10100		100	WG2082855
Propene	115-07-1	42.10	125	215	ND	ND		100	WG2082855
Styrene	100-42-5	104	400	1700	ND	ND		2000	WG2083774
1,1,2,2-Tetrachloroethane	79-34-5	168	400	2750	ND	ND		2000	WG2083774
Tetrachloroethylene	127-18-4	166	400	2720	ND	ND		2000	WG2083774
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG2082855
Toluene	108-88-3	92.10	1000	3770	ND	ND		2000	WG2083774
1,2,4-Trichlorobenzene	120-82-1	181	1260	9330	ND	ND		2000	WG2083774



Collected date/time: 06/15/23 12:27

L1627445

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	WG2082855
1,1,2-Trichloroethane	79-00-5	133	400	2180	ND	ND		2000	WG2083774
Trichloroethylene	79-01-6	131	400	2140	ND	ND		2000	WG2083774
1,2,4-Trimethylbenzene	95-63-6	120	400	1960	ND	ND		2000	WG2083774
1,3,5-Trimethylbenzene	108-67-8	120	400	1960	ND	ND		2000	WG2083774
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG2082855
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG2082855
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG2082855
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG2082855
m&p-Xylene	1330-20-7	106	800	3470	ND	ND		2000	WG2083774
o-Xylene	95-47-6	106	400	1730	ND	ND		2000	WG2083774
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	359000	1480000		100	WG2082855
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG2082855
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.2				WG2083774
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		102				WG2084545

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Volatile Organic Compounds (MS) by Method TO-15

L1627445-01

Method Blank (MB)

(MB) R3940406-2 06/22/23 12:24

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
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
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	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
Ethanol	0.290	U	0.265	2.50
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
Methylene Chloride	U		0.0979	0.200
2-Butanone (MEK)	U		0.0814	1.25
MTBE	U		0.0647	0.200
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Tetrahydrofuran	U		0.0734	0.200
1,1,1-Trichloroethane	U		0.0736	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
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	99.1			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3940406-1 06/22/23 09:16 • (LCSD) R3940406-3 06/22/23 16:10

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	3.42	3.57	91.2	95.2	70.0-130			4.29	25
Allyl chloride	3.75	3.29	3.42	87.7	91.2	70.0-130			3.87	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3940406-1 06/22/23 09:16 • (LCSD) R3940406-3 06/22/23 16:10

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 %
Bromomethane	3.75	3.28	3.29	87.5	87.7	70.0-130			0.304	25
1,3-Butadiene	3.75	3.06	3.18	81.6	84.8	70.0-130			3.85	25
Carbon disulfide	3.75	3.26	3.41	86.9	90.9	70.0-130			4.50	25
Carbon tetrachloride	3.75	3.81	3.88	102	103	70.0-130			1.82	25
Chloroethane	3.75	3.24	3.29	86.4	87.7	70.0-130			1.53	25
Chloroform	3.75	3.47	3.54	92.5	94.4	70.0-130			2.00	25
Chloromethane	3.75	3.15	3.26	84.0	86.9	70.0-130			3.43	25
1,1-Dichloroethane	3.75	3.52	3.57	93.9	95.2	70.0-130			1.41	25
1,1-Dichloroethene	3.75	3.29	3.40	87.7	90.7	70.0-130			3.29	25
cis-1,2-Dichloroethene	3.75	3.60	3.57	96.0	95.2	70.0-130			0.837	25
trans-1,2-Dichloroethene	3.75	3.57	3.64	95.2	97.1	70.0-130			1.94	25
Ethanol	3.75	3.09	3.55	82.4	94.7	55.0-148			13.9	25
Trichlorofluoromethane	3.75	3.30	3.46	88.0	92.3	70.0-130			4.73	25
Dichlorodifluoromethane	3.75	3.14	3.08	83.7	82.1	64.0-139			1.93	25
1,1,2-Trichlorotrifluoroethane	3.75	3.27	3.39	87.2	90.4	70.0-130			3.60	25
1,2-Dichlorotetrafluoroethane	3.75	3.25	3.34	86.7	89.1	70.0-130			2.73	25
Methylene Chloride	3.75	3.20	3.29	85.3	87.7	70.0-130			2.77	25
2-Butanone (MEK)	3.75	3.78	3.78	101	101	70.0-130			0.000	25
MTBE	3.75	3.68	3.70	98.1	98.7	70.0-130			0.542	25
2-Propanol	3.75	3.23	3.58	86.1	95.5	70.0-139			10.3	25
Propene	3.75	3.34	3.25	89.1	86.7	64.0-144			2.73	25
Tetrahydrofuran	3.75	3.49	3.48	93.1	92.8	70.0-137			0.287	25
1,1,1-Trichloroethane	3.75	3.67	3.70	97.9	98.7	70.0-130			0.814	25
2,2,4-Trimethylpentane	3.75	3.61	3.57	96.3	95.2	70.0-130			1.11	25
Vinyl chloride	3.75	3.24	3.34	86.4	89.1	70.0-130			3.04	25
Vinyl Bromide	3.75	3.33	3.43	88.8	91.5	70.0-130			2.96	25
Vinyl acetate	3.75	3.64	3.46	97.1	92.3	70.0-130			5.07	25
TPH (GC/MS) Low Fraction	188	172	172	91.5	91.5	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				105	105	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1627445-01

Method Blank (MB)

(MB) R3940968-3 06/24/23 08:42

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
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
Chlorobenzene	U		0.0832	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
1,2-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
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methyl Butyl Ketone	U		0.133	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl methacrylate	U		0.0876	0.200
Naphthalene	U		0.350	0.630
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
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
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	100			60.0-140

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Tr

⁶ Sr

⁷ Qc

⁸ Gl

⁹ Al

¹⁰ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3940968-1 06/24/23 07:17 • (LCSD) R3940968-2 06/24/23 08:00

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	3.75	4.18	4.08	111	109	70.0-130			2.42	25
Benzyl Chloride	3.75	3.90	3.81	104	102	70.0-152			2.33	25
Bromodichloromethane	3.75	4.14	4.08	110	109	70.0-130			1.46	25
Bromoform	3.75	4.20	4.14	112	110	70.0-130			1.44	25
Chlorobenzene	3.75	4.23	4.19	113	112	70.0-130			0.950	25
2-Chlorotoluene	3.75	4.41	4.36	118	116	70.0-130			1.14	25
Cyclohexane	3.75	4.57	4.49	122	120	70.0-130			1.77	25
Dibromochloromethane	3.75	4.19	4.17	112	111	70.0-130			0.478	25
1,2-Dibromoethane	3.75	4.37	4.33	117	115	70.0-130			0.920	25
1,2-Dichlorobenzene	3.75	4.56	4.52	122	121	70.0-130			0.881	25
1,3-Dichlorobenzene	3.75	4.68	4.59	125	122	70.0-130			1.94	25
1,4-Dichlorobenzene	3.75	4.77	4.67	127	125	70.0-130			2.12	25
1,2-Dichloroethane	3.75	4.26	4.17	114	111	70.0-130			2.14	25
1,2-Dichloropropane	3.75	4.15	4.04	111	108	70.0-130			2.69	25
cis-1,3-Dichloropropene	3.75	4.44	4.28	118	114	70.0-130			3.67	25
trans-1,3-Dichloropropene	3.75	4.42	4.36	118	116	70.0-130			1.37	25
1,4-Dioxane	3.75	4.66	4.53	124	121	70.0-140			2.83	25
Ethylbenzene	3.75	4.37	4.31	117	115	70.0-130			1.38	25
4-Ethyltoluene	3.75	4.73	4.56	126	122	70.0-130			3.66	25
Heptane	3.75	4.18	4.25	111	113	70.0-130			1.66	25
Hexachloro-1,3-butadiene	3.75	4.46	4.30	119	115	70.0-151			3.65	25
Isopropylbenzene	3.75	4.63	4.56	123	122	70.0-130			1.52	25
Methyl Butyl Ketone	3.75	3.88	3.78	103	101	70.0-149			2.61	25
4-Methyl-2-pentanone (MIBK)	3.75	4.34	4.29	116	114	70.0-139			1.16	25
Methyl methacrylate	3.75	4.35	4.31	116	115	70.0-130			0.924	25
Naphthalene	3.75	3.61	3.47	96.3	92.5	70.0-159			3.95	25
Styrene	3.75	4.60	4.54	123	121	70.0-130			1.31	25
1,1,2,2-Tetrachloroethane	3.75	4.19	4.13	112	110	70.0-130			1.44	25
Tetrachloroethylene	3.75	4.37	4.31	117	115	70.0-130			1.38	25
Toluene	3.75	4.30	4.23	115	113	70.0-130			1.64	25
1,2,4-Trichlorobenzene	3.75	3.90	3.79	104	101	70.0-160			2.86	25
1,1,2-Trichloroethane	3.75	4.26	4.19	114	112	70.0-130			1.66	25
Trichloroethylene	3.75	4.39	4.24	117	113	70.0-130			3.48	25
1,2,4-Trimethylbenzene	3.75	4.72	4.61	126	123	70.0-130			2.36	25
1,3,5-Trimethylbenzene	3.75	4.52	4.60	121	123	70.0-130			1.75	25
m&p-Xylene	7.50	9.04	8.89	121	119	70.0-130			1.67	25
o-Xylene	3.75	4.59	4.48	122	119	70.0-130			2.43	25
(S) 1,4-Bromofluorobenzene				103	104	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3941552-3 06/26/23 10:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	101			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3941552-1 06/26/23 09:11 • (LCSD) R3941552-2 06/26/23 09:55

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	3.69	3.67	98.4	97.9	70.0-130			0.543	25
(S) 1,4-Bromofluorobenzene				102	104	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.



Released to Imaging: 3/15/2024 3:23:00 PM



ANALYTICAL REPORT

June 30, 2023

Ensolum, LLC

Sample Delivery Group: L1629901
Samples Received: 06/27/2023
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

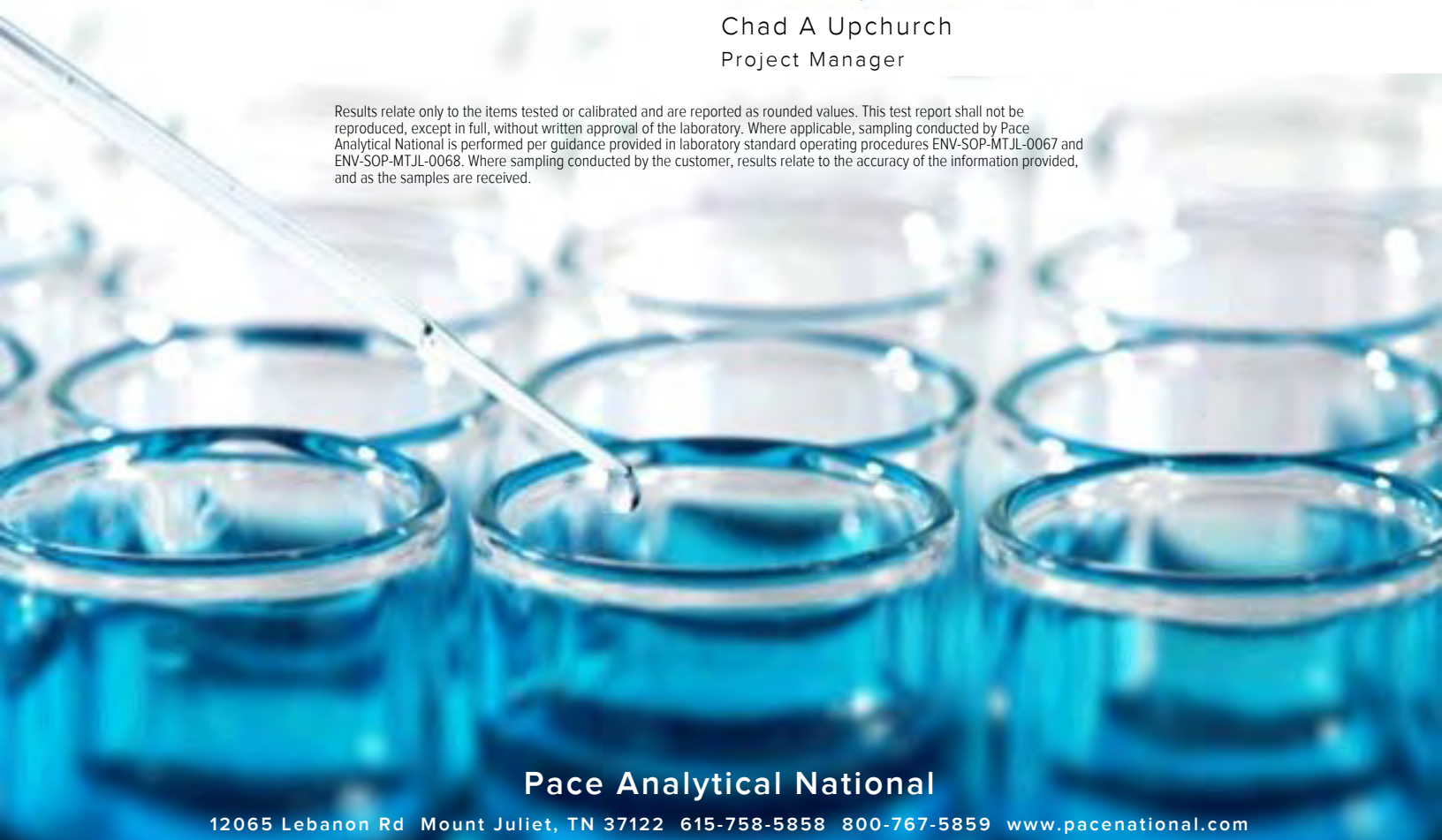


Entire Report Reviewed By:

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 L1629901-01	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 L1629901-01 Air

Collected by
Shane Diller

Collected date/time
06/23/23 11:39

Received date/time
06/27/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2085891	500	06/28/23 18:56	06/28/23 18:56	JAP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2086682	10000	06/29/23 15:46	06/29/23 15:46	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

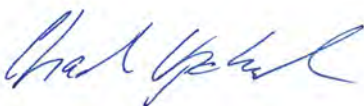
¹⁰ Sc

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: 06/30/2023 09:22					
Project Name: Levey Well		Laboratory Job Number: L1629901-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2085891 and WG2086682					
# 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: 06/30/2023 09:22					
Project Name: Levey Well		Laboratory Job Number: L1629901-01					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2085891 and WG2086682					
# 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: 06/30/2023 09:22	
Project Name: Levey Well		Laboratory Job Number: L1629901-01	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2085891 and WG2086682	
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: 06/23/23 11:39

L1629901

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	625	1490	ND	ND		500	WG2085891
Allyl chloride	107-05-1	76.53	100	313	ND	ND		500	WG2085891
Benzene	71-43-2	78.10	100	319	ND	ND		500	WG2085891
Benzyl Chloride	100-44-7	127	100	519	ND	ND		500	WG2085891
Bromodichloromethane	75-27-4	164	100	671	ND	ND		500	WG2085891
Bromoform	75-25-2	253	300	3100	ND	ND		500	WG2085891
Bromomethane	74-83-9	94.90	100	388	ND	ND		500	WG2085891
1,3-Butadiene	106-99-0	54.10	1000	2210	ND	ND		500	WG2085891
Carbon disulfide	75-15-0	76.10	100	311	135	420		500	WG2085891
Carbon tetrachloride	56-23-5	154	100	630	ND	ND		500	WG2085891
Chlorobenzene	108-90-7	113	100	462	ND	ND		500	WG2085891
Chloroethane	75-00-3	64.50	100	264	ND	ND		500	WG2085891
Chloroform	67-66-3	119	100	487	ND	ND		500	WG2085891
Chloromethane	74-87-3	50.50	100	207	21400	44200		500	WG2085891
2-Chlorotoluene	95-49-8	126	100	515	ND	ND		500	WG2085891
Cyclohexane	110-82-7	84.20	100	344	28500	98100		500	WG2085891
Dibromochloromethane	124-48-1	208	100	851	ND	ND		500	WG2085891
1,2-Dibromoethane	106-93-4	188	100	769	ND	ND		500	WG2085891
1,2-Dichlorobenzene	95-50-1	147	100	601	ND	ND		500	WG2085891
1,3-Dichlorobenzene	541-73-1	147	100	601	ND	ND		500	WG2085891
1,4-Dichlorobenzene	106-46-7	147	100	601	ND	ND		500	WG2085891
1,2-Dichloroethane	107-06-2	99	100	405	ND	ND		500	WG2085891
1,1-Dichloroethane	75-34-3	98	100	401	ND	ND		500	WG2085891
1,1-Dichloroethene	75-35-4	96.90	100	396	ND	ND		500	WG2085891
cis-1,2-Dichloroethene	156-59-2	96.90	100	396	ND	ND		500	WG2085891
trans-1,2-Dichloroethene	156-60-5	96.90	100	396	ND	ND		500	WG2085891
1,2-Dichloropropane	78-87-5	113	100	462	ND	ND		500	WG2085891
cis-1,3-Dichloropropene	10061-01-5	111	100	454	ND	ND		500	WG2085891
trans-1,3-Dichloropropene	10061-02-6	111	100	454	ND	ND		500	WG2085891
1,4-Dioxane	123-91-1	88.10	100	360	ND	ND		500	WG2085891
Ethanol	64-17-5	46.10	1250	2360	ND	ND		500	WG2085891
Ethylbenzene	100-41-4	106	100	434	123	533		500	WG2085891
4-Ethyltoluene	622-96-8	120	100	491	ND	ND		500	WG2085891
Trichlorofluoromethane	75-69-4	137.40	100	562	ND	ND		500	WG2085891
Dichlorodifluoromethane	75-71-8	120.92	100	495	ND	ND		500	WG2085891
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	100	766	ND	ND		500	WG2085891
1,2-Dichlorotetrafluoroethane	76-14-2	171	100	699	ND	ND		500	WG2085891
Heptane	142-82-5	100	100	409	21800	89200		500	WG2085891
Hexachloro-1,3-butadiene	87-68-3	261	315	3360	ND	ND		500	WG2085891
n-Hexane	110-54-3	86.20	6300	22200	458000	1610000		10000	WG2086682
Isopropylbenzene	98-82-8	120.20	100	492	ND	ND		500	WG2085891
Methylene Chloride	75-09-2	84.90	100	347	ND	ND		500	WG2085891
Methyl Butyl Ketone	591-78-6	100	625	2560	ND	ND		500	WG2085891
2-Butanone (MEK)	78-93-3	72.10	625	1840	ND	ND		500	WG2085891
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	625	2560	ND	ND		500	WG2085891
Methyl methacrylate	80-62-6	100.12	100	409	ND	ND		500	WG2085891
MTBE	1634-04-4	88.10	100	360	ND	ND		500	WG2085891
Naphthalene	91-20-3	128	315	1650	ND	ND		500	WG2085891
2-Propanol	67-63-0	60.10	625	1540	6020	14800		500	WG2085891
Propene	115-07-1	42.10	625	1080	ND	ND		500	WG2085891
Styrene	100-42-5	104	100	425	ND	ND		500	WG2085891
1,1,2,2-Tetrachloroethane	79-34-5	168	100	687	ND	ND		500	WG2085891
Tetrachloroethylene	127-18-4	166	100	679	ND	ND		500	WG2085891
Tetrahydrofuran	109-99-9	72.10	100	295	ND	ND		500	WG2085891
Toluene	108-88-3	92.10	250	942	ND	ND		500	WG2085891
1,2,4-Trichlorobenzene	120-82-1	181	315	2330	ND	ND		500	WG2085891



Collected date/time: 06/23/23 11:39

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	100	544	ND	ND		500	WG2085891
1,1,2-Trichloroethane	79-00-5	133	100	544	ND	ND		500	WG2085891
Trichloroethylene	79-01-6	131	100	536	ND	ND		500	WG2085891
1,2,4-Trimethylbenzene	95-63-6	120	100	491	ND	ND		500	WG2085891
1,3,5-Trimethylbenzene	108-67-8	120	100	491	ND	ND		500	WG2085891
2,2,4-Trimethylpentane	540-84-1	114.22	100	467	ND	ND		500	WG2085891
Vinyl chloride	75-01-4	62.50	100	256	ND	ND		500	WG2085891
Vinyl Bromide	593-60-2	106.95	100	437	ND	ND		500	WG2085891
Vinyl acetate	108-05-4	86.10	100	352	ND	ND		500	WG2085891
m&p-Xylene	1330-20-7	106	200	867	297	1290		500	WG2085891
o-Xylene	95-47-6	106	100	434	138	598		500	WG2085891
TPH (GC/MS) Low Fraction	8006-61-9	101	100000	413000	589000	2430000		500	WG2085891
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.8				WG2085891
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		90.3				WG2086682

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1629901-01

Method Blank (MB)

(MB) R3942752-3 06/28/23 12:02

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	2.50
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

L1629901-01

Method Blank (MB)

(MB) R3942752-3 06/28/23 12:02

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	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	40.0	⬇	39.7	200
(S) 1,4-Bromofluorobenzene	98.4			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3942752-1 06/28/23 11:04 • (LCSD) R3942752-2 06/28/23 11:34

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	3.56	3.66	94.9	97.6	70.0-130			2.77	25
Allyl chloride	3.75	3.56	3.59	94.9	95.7	70.0-130			0.839	25
Benzene	3.75	3.74	3.76	99.7	100	70.0-130			0.533	25
Benzyl Chloride	3.75	3.96	3.98	106	106	70.0-152			0.504	25
Bromodichloromethane	3.75	3.82	3.86	102	103	70.0-130			1.04	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3942752-1 06/28/23 11:04 • (LCSD) R3942752-2 06/28/23 11:34

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	3.70	3.64	98.7	97.1	70.0-130			1.63	25
Bromomethane	3.75	3.44	3.50	91.7	93.3	70.0-130			1.73	25
1,3-Butadiene	3.75	3.79	3.67	101	97.9	70.0-130			3.22	25
Carbon disulfide	3.75	3.78	3.69	101	98.4	70.0-130			2.41	25
Carbon tetrachloride	3.75	3.72	3.64	99.2	97.1	70.0-130			2.17	25
Chlorobenzene	3.75	3.81	3.80	102	101	70.0-130			0.263	25
Chloroethane	3.75	3.56	3.50	94.9	93.3	70.0-130			1.70	25
Chloroform	3.75	3.61	3.63	96.3	96.8	70.0-130			0.552	25
Chloromethane	3.75	3.58	3.53	95.5	94.1	70.0-130			1.41	25
2-Chlorotoluene	3.75	3.76	3.73	100	99.5	70.0-130			0.801	25
Cyclohexane	3.75	3.52	3.61	93.9	96.3	70.0-130			2.52	25
Dibromochloromethane	3.75	3.78	3.93	101	105	70.0-130			3.89	25
1,2-Dibromoethane	3.75	3.79	3.76	101	100	70.0-130			0.795	25
1,2-Dichlorobenzene	3.75	3.66	3.76	97.6	100	70.0-130			2.70	25
1,3-Dichlorobenzene	3.75	3.75	3.75	100	100	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	3.71	3.73	98.9	99.5	70.0-130			0.538	25
1,2-Dichloroethane	3.75	3.70	3.71	98.7	98.9	70.0-130			0.270	25
1,1-Dichloroethane	3.75	3.67	3.68	97.9	98.1	70.0-130			0.272	25
1,1-Dichloroethene	3.75	3.62	3.61	96.5	96.3	70.0-130			0.277	25
cis-1,2-Dichloroethene	3.75	3.63	3.65	96.8	97.3	70.0-130			0.549	25
trans-1,2-Dichloroethene	3.75	3.60	3.76	96.0	100	70.0-130			4.35	25
1,2-Dichloropropane	3.75	3.86	3.75	103	100	70.0-130			2.89	25
cis-1,3-Dichloropropene	3.75	4.01	3.92	107	105	70.0-130			2.27	25
trans-1,3-Dichloropropene	3.75	3.79	3.86	101	103	70.0-130			1.83	25
1,4-Dioxane	3.75	3.65	3.64	97.3	97.1	70.0-140			0.274	25
Ethanol	3.75	3.62	3.69	96.5	98.4	55.0-148			1.92	25
Ethylbenzene	3.75	3.67	3.72	97.9	99.2	70.0-130			1.35	25
4-Ethyltoluene	3.75	3.85	3.76	103	100	70.0-130			2.37	25
Trichlorofluoromethane	3.75	3.52	3.56	93.9	94.9	70.0-130			1.13	25
Dichlorodifluoromethane	3.75	3.56	3.58	94.9	95.5	64.0-139			0.560	25
1,1,2-Trichlorotrifluoroethane	3.75	3.55	3.59	94.7	95.7	70.0-130			1.12	25
1,2-Dichlorotetrafluoroethane	3.75	3.58	3.57	95.5	95.2	70.0-130			0.280	25
Heptane	3.75	3.82	3.81	102	102	70.0-130			0.262	25
Hexachloro-1,3-butadiene	3.75	3.57	3.44	95.2	91.7	70.0-151			3.71	25
Isopropylbenzene	3.75	3.77	3.75	101	100	70.0-130			0.532	25
Methylene Chloride	3.75	3.53	3.60	94.1	96.0	70.0-130			1.96	25
Methyl Butyl Ketone	3.75	3.89	3.84	104	102	70.0-149			1.29	25
2-Butanone (MEK)	3.75	3.70	3.89	98.7	104	70.0-130			5.01	25
4-Methyl-2-pentanone (MIBK)	3.75	3.91	3.58	104	95.5	70.0-139			8.81	25
Methyl methacrylate	3.75	3.63	3.70	96.8	98.7	70.0-130			1.91	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3942752-1 06/28/23 11:04 • (LCSD) R3942752-2 06/28/23 11:34

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	3.68	3.67	98.1	97.9	70.0-130			0.272	25
Naphthalene	3.75	3.98	4.06	106	108	70.0-159			1.99	25
2-Propanol	3.75	3.59	3.58	95.7	95.5	70.0-139			0.279	25
Propene	3.75	3.72	3.68	99.2	98.1	64.0-144			1.08	25
Styrene	3.75	3.71	3.77	98.9	101	70.0-130			1.60	25
1,1,2,2-Tetrachloroethane	3.75	3.84	3.84	102	102	70.0-130			0.000	25
Tetrachloroethylene	3.75	3.70	3.62	98.7	96.5	70.0-130			2.19	25
Tetrahydrofuran	3.75	3.89	3.83	104	102	70.0-137			1.55	25
Toluene	3.75	3.74	3.81	99.7	102	70.0-130			1.85	25
1,2,4-Trichlorobenzene	3.75	4.43	4.39	118	117	70.0-160			0.907	25
1,1,1-Trichloroethane	3.75	3.70	3.65	98.7	97.3	70.0-130			1.36	25
1,1,2-Trichloroethane	3.75	3.67	3.66	97.9	97.6	70.0-130			0.273	25
Trichloroethylene	3.75	3.70	3.78	98.7	101	70.0-130			2.14	25
1,2,4-Trimethylbenzene	3.75	3.82	3.82	102	102	70.0-130			0.000	25
1,3,5-Trimethylbenzene	3.75	3.74	3.81	99.7	102	70.0-130			1.85	25
2,2,4-Trimethylpentane	3.75	3.70	3.75	98.7	100	70.0-130			1.34	25
Vinyl chloride	3.75	3.56	3.52	94.9	93.9	70.0-130			1.13	25
Vinyl Bromide	3.75	3.67	3.70	97.9	98.7	70.0-130			0.814	25
Vinyl acetate	3.75	3.36	3.20	89.6	85.3	70.0-130			4.88	25
m&p-Xylene	7.50	7.61	7.62	101	102	70.0-130			0.131	25
o-Xylene	3.75	3.79	3.83	101	102	70.0-130			1.05	25
TPH (GC/MS) Low Fraction	188	183	184	97.3	97.9	70.0-130			0.545	25
(S) 1,4-Bromofluorobenzene				99.4	100	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1629901-01

Method Blank (MB)

(MB) R3943021-2 06/29/23 09:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	88.0			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3943021-1 06/29/23 08:58 • (LCSD) R3943021-3 06/29/23 10:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	3.59	3.50	95.7	93.3	70.0-130			2.54	25
(S) 1,4-Bromofluorobenzene				96.7	97.3	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

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Released to Imaging: 3/15/2024 3:23:00 PM



ANALYTICAL REPORT

July 05, 2023

Ensolum, LLC

Sample Delivery Group: L1630304
Samples Received: 06/28/2023
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
601 N Marienfeld Street, Ste. 400
Midland, TX 79701

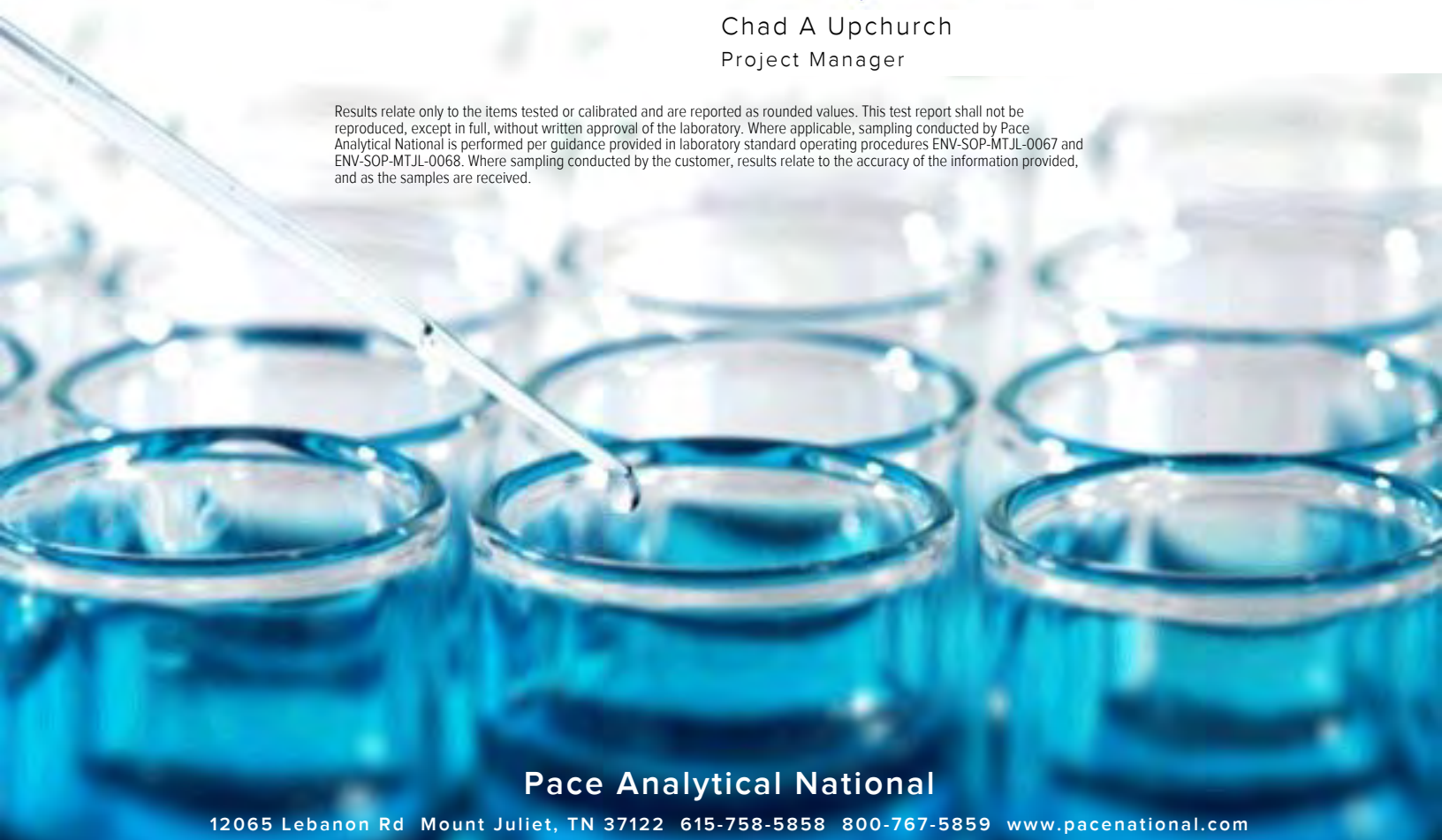


Entire Report Reviewed By:

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	⁶ Sr
LEVEY WELL L1630304-01	9	
LEVEY WELL L1630304-02	11	
LEVEY WELL L1630304-03	13	⁷ Qc
LEVEY WELL L1630304-04	15	⁸ Gl
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LEVEY WELL L1630304-01 Air

Collected by
Shane Diller

Collected date/time
06/26/23 08:50

Received date/time
06/28/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2086680	1	06/29/23 20:12	06/29/23 20:12	AA	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2087449	100	06/30/23 18:35	06/30/23 18:35	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2087990	200	07/01/23 17:26	07/01/23 17:26	SDS	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

LEVEY WELL L1630304-02 Air

Collected by
Shane Diller

Collected date/time
06/26/23 10:03

Received date/time
06/28/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2086680	1	06/29/23 20:42	06/29/23 20:42	AA	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2087449	20	06/30/23 17:22	06/30/23 17:22	DAH	Mt. Juliet, TN

LEVEY WELL L1630304-03 Air

Collected by
Shane Diller

Collected date/time
06/26/23 11:08

Received date/time
06/28/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2086680	1	06/29/23 21:13	06/29/23 21:13	AA	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2087449	20	06/30/23 14:56	06/30/23 14:56	DAH	Mt. Juliet, TN

LEVEY WELL L1630304-04 Air

Collected by
Shane Diller

Collected date/time
06/26/23 12:08

Received date/time
06/28/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2086680	1	06/29/23 21:42	06/29/23 21:42	AA	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2087449	20	06/30/23 17:58	06/30/23 17:58	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2087990	100	07/01/23 18:02	07/01/23 18:02	SDS	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chad A Upchurch
Project Manager

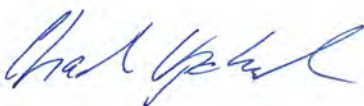
- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Tr
- ⁶ Sr
- ⁷ Qc
- ⁸ Gl
- ⁹ Al
- ¹⁰ Sc

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: 07/05/2023 10:05					
Project Name: Levey Well		Laboratory Job Number: L1630304-01, 02, 03 and 04					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2086680, WG2087449 and WG2087990					
# 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: 07/05/2023 10:05					
Project Name: Levey Well		Laboratory Job Number: L1630304-01, 02, 03 and 04					
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2086680, WG2087449 and WG2087990					
# 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: 07/05/2023 10:05	
Project Name: Levey Well		Laboratory Job Number: L1630304-01, 02, 03 and 04	
Reviewer Name: Chad A Upchurch		Prep Batch Number(s): WG2086680, WG2087449 and WG2087990	
ER #¹	Description		
1	TO-15 WG2086680 L1630304-01 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: 06/26/23 08:50

L1630304

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG2086680
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2086680
Benzene	71-43-2	78.10	0.200	0.639	0.801	2.56		1	WG2086680
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2086680
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2086680
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2086680
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2086680
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2086680
Carbon disulfide	75-15-0	76.10	0.200	0.622	6.37	19.8		1	WG2086680
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2086680
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2086680
Chloroethane	75-00-3	64.50	0.200	0.528	0.520	1.37		1	WG2086680
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2086680
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2086680
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2086680
Cyclohexane	110-82-7	84.20	20.0	68.9	1090	3750		100	WG2087449
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2086680
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2086680
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2086680
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2086680
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2086680
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2086680
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2086680
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2086680
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2086680
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2086680
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2086680
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2086680
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2086680
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2086680
Ethanol	64-17-5	46.10	2.50	4.71	208	392	E	1	WG2086680
Ethylbenzene	100-41-4	106	0.200	0.867	5.22	22.6		1	WG2086680
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.99	9.77		1	WG2086680
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2086680
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2086680
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	0.291	2.23		1	WG2086680
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2086680
Heptane	142-82-5	100	20.0	81.8	1180	4830		100	WG2087449
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2086680
n-Hexane	110-54-3	86.20	126	444	11100	39100		200	WG2087990
Isopropylbenzene	98-82-8	120.20	0.200	0.983	1.24	6.10		1	WG2086680
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2086680
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2086680
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	50.4	149		1	WG2086680
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2086680
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2086680
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2086680
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2086680
2-Propanol	67-63-0	60.10	1.25	3.07	10.1	24.8		1	WG2086680
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2086680
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2086680
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2086680
Tetrachloroethylene	127-18-4	166	0.200	1.36	5.02	34.1		1	WG2086680
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2086680
Toluene	108-88-3	92.10	0.500	1.88	4.75	17.9		1	WG2086680
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2086680

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 06/26/23 08:50

L1630304

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	WG2086680
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2086680
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2086680
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	3.83	18.8		1	WG2086680
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	2.48	12.2		1	WG2086680
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2086680
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2086680
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2086680
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2086680
m&p-Xylene	1330-20-7	106	0.400	1.73	9.60	41.6		1	WG2086680
o-Xylene	95-47-6	106	0.200	0.867	6.95	30.1		1	WG2086680
TPH (GC/MS) Low Fraction	8006-61-9	101	20000	82600	35400	146000		100	WG2087449
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		140				WG2086680
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		93.2				WG2087449
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.7				WG2087990

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Collected date/time: 06/26/23 10:03

L1630304

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG2086680
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2086680
Benzene	71-43-2	78.10	0.200	0.639	1.19	3.80		1	WG2086680
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2086680
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2086680
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2086680
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2086680
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2086680
Carbon disulfide	75-15-0	76.10	0.200	0.622	7.33	22.8		1	WG2086680
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2086680
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2086680
Chloroethane	75-00-3	64.50	0.200	0.528	1.09	2.88		1	WG2086680
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2086680
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2086680
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2086680
Cyclohexane	110-82-7	84.20	4.00	13.8	106	365		20	WG2087449
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2086680
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2086680
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2086680
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2086680
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2086680
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2086680
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2086680
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2086680
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2086680
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2086680
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2086680
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2086680
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2086680
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2086680
Ethanol	64-17-5	46.10	2.50	4.71	77.0	145		1	WG2086680
Ethylbenzene	100-41-4	106	0.200	0.867	1.66	7.20		1	WG2086680
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.888	4.36		1	WG2086680
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.233	1.31		1	WG2086680
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.541	2.68		1	WG2086680
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2086680
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2086680
Heptane	142-82-5	100	4.00	16.4	129	528		20	WG2087449
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2086680
n-Hexane	110-54-3	86.20	12.6	44.4	877	3090		20	WG2087449
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.406	2.00		1	WG2086680
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.543	1.89		1	WG2086680
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2086680
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	12.3	36.3		1	WG2086680
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2086680
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2086680
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2086680
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2086680
2-Propanol	67-63-0	60.10	1.25	3.07	16.6	40.8		1	WG2086680
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2086680
Styrene	100-42-5	104	0.200	0.851	0.249	1.06		1	WG2086680
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2086680
Tetrachloroethylene	127-18-4	166	0.200	1.36	3.22	21.9		1	WG2086680
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2086680
Toluene	108-88-3	92.10	0.500	1.88	3.28	12.4		1	WG2086680
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2086680

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 06/26/23 10:03

L1630304

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	WG2086680
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2086680
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2086680
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.22	10.9		1	WG2086680
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.27	6.23		1	WG2086680
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2086680
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2086680
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2086680
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2086680
m&p-Xylene	1330-20-7	106	0.400	1.73	2.90	12.6		1	WG2086680
o-Xylene	95-47-6	106	0.200	0.867	2.30	9.97		1	WG2086680
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	4090	16900		1	WG2086680
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		118				WG2086680
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.5				WG2087449

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 06/26/23 11:08

L1630304

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG2086680
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2086680
Benzene	71-43-2	78.10	0.200	0.639	0.736	2.35		1	WG2086680
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2086680
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2086680
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2086680
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2086680
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2086680
Carbon disulfide	75-15-0	76.10	0.200	0.622	5.36	16.7		1	WG2086680
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2086680
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2086680
Chloroethane	75-00-3	64.50	0.200	0.528	1.94	5.12		1	WG2086680
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2086680
Chloromethane	74-87-3	50.50	0.200	0.413	2.04	4.21		1	WG2086680
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2086680
Cyclohexane	110-82-7	84.20	0.200	0.689	92.5	319		1	WG2086680
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2086680
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2086680
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2086680
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2086680
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2086680
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2086680
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2086680
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2086680
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2086680
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2086680
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2086680
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2086680
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2086680
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2086680
Ethanol	64-17-5	46.10	2.50	4.71	41.3	77.9		1	WG2086680
Ethylbenzene	100-41-4	106	0.200	0.867	1.86	8.06		1	WG2086680
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.48	7.26		1	WG2086680
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.242	1.36		1	WG2086680
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.528	2.61		1	WG2086680
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2086680
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2086680
Heptane	142-82-5	100	0.200	0.818	91.6	375		1	WG2086680
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2086680
n-Hexane	110-54-3	86.20	12.6	44.4	714	2520		20	WG2087449
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.583	2.87		1	WG2086680
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2086680
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2086680
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	12.6	37.2		1	WG2086680
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2086680
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2086680
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2086680
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2086680
2-Propanol	67-63-0	60.10	1.25	3.07	10.6	26.1		1	WG2086680
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2086680
Styrene	100-42-5	104	0.200	0.851	0.299	1.27		1	WG2086680
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2086680
Tetrachloroethylene	127-18-4	166	0.200	1.36	4.50	30.6		1	WG2086680
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2086680
Toluene	108-88-3	92.10	0.500	1.88	1.48	5.57		1	WG2086680
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2086680

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 06/26/23 11:08

L1630304

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	WG2086680
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2086680
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2086680
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	5.11	25.1		1	WG2086680
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	2.15	10.6		1	WG2086680
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2086680
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2086680
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2086680
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2086680
m&p-Xylene	1330-20-7	106	0.400	1.73	3.67	15.9		1	WG2086680
o-Xylene	95-47-6	106	0.200	0.867	3.04	13.2		1	WG2086680
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	3850	15900		1	WG2086680
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		116				WG2086680
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		91.8				WG2087449

1

Cp

2

Tc

3

Ss

4

Cn

5

Tr

6

Sr

7

Qc

8

Gl

9

Al

10

Sc

Collected date/time: 06/26/23 12:08

L1630304

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG2086680
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2086680
Benzene	71-43-2	78.10	0.200	0.639	0.703	2.25		1	WG2086680
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2086680
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2086680
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2086680
Bromomethane	74-83-9	94.90	0.200	0.776	0.343	1.33		1	WG2086680
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2086680
Carbon disulfide	75-15-0	76.10	0.200	0.622	22.1	68.8		1	WG2086680
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2086680
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2086680
Chloroethane	75-00-3	64.50	0.200	0.528	3.68	9.71		1	WG2086680
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2086680
Chloromethane	74-87-3	50.50	0.200	0.413	4.31	8.90		1	WG2086680
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2086680
Cyclohexane	110-82-7	84.20	4.00	13.8	299	1030		20	WG2087449
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2086680
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2086680
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2086680
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2086680
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2086680
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2086680
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2086680
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2086680
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2086680
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2086680
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2086680
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2086680
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2086680
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2086680
Ethanol	64-17-5	46.10	2.50	4.71	106	200	E	1	WG2086680
Ethylbenzene	100-41-4	106	0.200	0.867	2.29	9.93		1	WG2086680
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.26	6.18		1	WG2086680
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.212	1.19		1	WG2086680
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.503	2.49		1	WG2086680
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2086680
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2086680
Heptane	142-82-5	100	4.00	16.4	347	1420		20	WG2087449
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2086680
n-Hexane	110-54-3	86.20	63.0	222	2430	8570		100	WG2087990
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.564	2.77		1	WG2086680
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.486	1.69		1	WG2086680
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2086680
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	36.9	109		1	WG2086680
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2086680
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2086680
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2086680
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2086680
2-Propanol	67-63-0	60.10	1.25	3.07	61.1	150		1	WG2086680
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2086680
Styrene	100-42-5	104	0.200	0.851	0.298	1.27		1	WG2086680
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2086680
Tetrachloroethylene	127-18-4	166	0.200	1.36	4.08	27.7		1	WG2086680
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2086680
Toluene	108-88-3	92.10	0.500	1.88	4.27	16.1		1	WG2086680
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2086680

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 06/26/23 12:08

L1630304

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	WG2086680
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2086680
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2086680
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	4.03	19.8		1	WG2086680
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.86	9.13		1	WG2086680
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2086680
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2086680
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2086680
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2086680
m&p-Xylene	1330-20-7	106	0.400	1.73	3.74	16.2		1	WG2086680
o-Xylene	95-47-6	106	0.200	0.867	2.86	12.4		1	WG2086680
TPH (GC/MS) Low Fraction	8006-61-9	101	4000	16500	10100	41700		20	WG2087449
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		121				WG2086680
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.1				WG2087449
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.9				WG2087990

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3943028-3 06/29/23 09:43

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	0.267	U	0.265	2.50
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

Method Blank (MB)

(MB) R3943028-3 06/29/23 09:43

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	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	54.9	⬇	39.7	200
(S) 1,4-Bromofluorobenzene	105			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3943028-1 06/29/23 08:43 • (LCSD) R3943028-2 06/29/23 09:13

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	4.12	4.26	110	114	70.0-130			3.34	25
Allyl chloride	3.75	4.41	4.41	118	118	70.0-130			0.000	25
Benzene	3.75	3.75	3.76	100	100	70.0-130			0.266	25
Benzyl Chloride	3.75	4.39	4.54	117	121	70.0-152			3.36	25
Bromodichloromethane	3.75	4.02	4.07	107	109	70.0-130			1.24	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3943028-1 06/29/23 08:43 • (LCSD) R3943028-2 06/29/23 09:13

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	4.28	4.36	114	116	70.0-130			1.85	25
Bromomethane	3.75	4.41	4.46	118	119	70.0-130			1.13	25
1,3-Butadiene	3.75	4.12	4.28	110	114	70.0-130			3.81	25
Carbon disulfide	3.75	4.46	4.49	119	120	70.0-130			0.670	25
Carbon tetrachloride	3.75	4.06	4.10	108	109	70.0-130			0.980	25
Chlorobenzene	3.75	4.13	4.13	110	110	70.0-130			0.000	25
Chloroethane	3.75	4.32	4.36	115	116	70.0-130			0.922	25
Chloroform	3.75	3.77	3.80	101	101	70.0-130			0.793	25
Chloromethane	3.75	3.85	3.92	103	105	70.0-130			1.80	25
2-Chlorotoluene	3.75	4.16	4.27	111	114	70.0-130			2.61	25
Cyclohexane	3.75	3.65	3.73	97.3	99.5	70.0-130			2.17	25
Dibromochloromethane	3.75	4.32	4.39	115	117	70.0-130			1.61	25
1,2-Dibromoethane	3.75	4.16	4.28	111	114	70.0-130			2.84	25
1,2-Dichlorobenzene	3.75	4.52	4.69	121	125	70.0-130			3.69	25
1,3-Dichlorobenzene	3.75	4.53	4.65	121	124	70.0-130			2.61	25
1,4-Dichlorobenzene	3.75	4.56	4.72	122	126	70.0-130			3.45	25
1,2-Dichloroethane	3.75	3.75	3.76	100	100	70.0-130			0.266	25
1,1-Dichloroethane	3.75	4.05	4.17	108	111	70.0-130			2.92	25
1,1-Dichloroethene	3.75	4.38	4.45	117	119	70.0-130			1.59	25
cis-1,2-Dichloroethene	3.75	3.69	3.73	98.4	99.5	70.0-130			1.08	25
trans-1,2-Dichloroethene	3.75	4.16	4.25	111	113	70.0-130			2.14	25
1,2-Dichloropropane	3.75	3.68	3.72	98.1	99.2	70.0-130			1.08	25
cis-1,3-Dichloropropene	3.75	4.23	3.97	113	106	70.0-130			6.34	25
trans-1,3-Dichloropropene	3.75	4.04	4.03	108	107	70.0-130			0.248	25
1,4-Dioxane	3.75	3.64	3.81	97.1	102	70.0-140			4.56	25
Ethanol	3.75	4.13	4.33	110	115	55.0-148			4.73	25
Ethylbenzene	3.75	3.84	3.93	102	105	70.0-130			2.32	25
4-Ethyltoluene	3.75	4.38	4.53	117	121	70.0-130			3.37	25
Trichlorofluoromethane	3.75	4.52	4.54	121	121	70.0-130			0.442	25
Dichlorodifluoromethane	3.75	4.28	4.38	114	117	64.0-139			2.31	25
1,1,2-Trichlorotrifluoroethane	3.75	4.37	4.42	117	118	70.0-130			1.14	25
1,2-Dichlorotetrafluoroethane	3.75	4.25	4.20	113	112	70.0-130			1.18	25
Heptane	3.75	3.53	3.56	94.1	94.9	70.0-130			0.846	25
Hexachloro-1,3-butadiene	3.75	4.61	4.80	123	128	70.0-151			4.04	25
Isopropylbenzene	3.75	4.11	4.23	110	113	70.0-130			2.88	25
Methylene Chloride	3.75	4.25	4.24	113	113	70.0-130			0.236	25
Methyl Butyl Ketone	3.75	3.46	3.63	92.3	96.8	70.0-149			4.80	25
2-Butanone (MEK)	3.75	3.66	3.80	97.6	101	70.0-130			3.75	25
4-Methyl-2-pentanone (MIBK)	3.75	3.40	3.63	90.7	96.8	70.0-139			6.54	25
Methyl methacrylate	3.75	3.79	3.98	101	106	70.0-130			4.89	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1630304-01,02,03,04

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3943028-1 06/29/23 08:43 • (LCSD) R3943028-2 06/29/23 09:13

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	3.71	3.90	98.9	104	70.0-130			4.99	25
Naphthalene	3.75	4.04	4.20	108	112	70.0-159			3.88	25
2-Propanol	3.75	4.22	4.38	113	117	70.0-139			3.72	25
Propene	3.75	4.20	4.29	112	114	64.0-144			2.12	25
Styrene	3.75	4.19	4.32	112	115	70.0-130			3.06	25
1,1,2,2-Tetrachloroethane	3.75	4.15	4.32	111	115	70.0-130			4.01	25
Tetrachloroethylene	3.75	4.12	4.19	110	112	70.0-130			1.68	25
Tetrahydrofuran	3.75	3.43	3.55	91.5	94.7	70.0-137			3.44	25
Toluene	3.75	3.82	3.88	102	103	70.0-130			1.56	25
1,2,4-Trichlorobenzene	3.75	4.54	4.70	121	125	70.0-160			3.46	25
1,1,1-Trichloroethane	3.75	3.94	3.97	105	106	70.0-130			0.759	25
1,1,2-Trichloroethane	3.75	4.03	4.15	107	111	70.0-130			2.93	25
Trichloroethylene	3.75	3.83	3.91	102	104	70.0-130			2.07	25
1,2,4-Trimethylbenzene	3.75	4.42	4.62	118	123	70.0-130			4.42	25
1,3,5-Trimethylbenzene	3.75	4.46	4.61	119	123	70.0-130			3.31	25
2,2,4-Trimethylpentane	3.75	3.60	3.61	96.0	96.3	70.0-130			0.277	25
Vinyl chloride	3.75	4.30	4.35	115	116	70.0-130			1.16	25
Vinyl Bromide	3.75	4.44	4.54	118	121	70.0-130			2.23	25
Vinyl acetate	3.75	2.84	2.93	75.7	78.1	70.0-130			3.12	25
m&p-Xylene	7.50	8.04	8.17	107	109	70.0-130			1.60	25
o-Xylene	3.75	4.09	4.22	109	113	70.0-130			3.13	25
TPH (GC/MS) Low Fraction	188	227	232	121	123	70.0-130			2.18	25
(S) 1,4-Bromofluorobenzene				104	107	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3943722-3 06/30/23 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
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	92.6			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3943722-1 06/30/23 08:46 • (LCSD) R3943722-2 06/30/23 09:25

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	3.73	3.75	99.5	100	70.0-130			0.535	25
Heptane	3.75	3.75	3.68	100	98.1	70.0-130			1.88	25
n-Hexane	3.75	3.81	3.76	102	100	70.0-130			1.32	25
TPH (GC/MS) Low Fraction	188	172	171	91.5	91.0	70.0-130			0.583	25
(S) 1,4-Bromofluorobenzene				94.6	94.7	60.0-140				

Method Blank (MB)

(MB) R3944236-3 07/01/23 09:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	98.0			60.0-140

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3944236-1 07/01/23 08:13 • (LCSD) R3944236-2 07/01/23 08:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	3.74	3.73	99.7	99.5	70.0-130			0.268	25
(S) 1,4-Bromofluorobenzene				97.8	98.1	60.0-140				

1

Cp

2

Tc

3

Ss

4

Cn

5

Tr

6

Sr

7

Qc

8

Gl

9

Al

10

Sc

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.



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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/19/2023 5:18:50 PM

JOB DESCRIPTION

South Hobbs - 03B1417002
South Hobbs

JOB NUMBER

880-29354-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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

Laboratory Job ID: 880-29354-1

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Definitions/Glossary

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

Job ID: 880-29354-1

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

HPLC/IC

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 880-29354-1

Job ID: 880-29354-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-29354-1

Receipt

The samples were received on 6/9/2023 3:49 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 4.3°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

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-107354 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFMS: Reanalysis of the following samples were performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis : MW-1 (880-29354-1) and MW-2 (880-29354-2).

Method 300_ORGFMS: The instrument blank/CCB for analytical batch 860-107355 contained Nitrite as N greater than the method detection limit (MDL),therefore, re-extraction and/or re-analysis of samples was not performed.The data have been qualified and reported.

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: 880-29354-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29354-1

Date Collected: 06/09/23 10:25

Matrix: Water

Date Received: 06/09/23 15:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/13/23 15:23	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/13/23 15:23	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/13/23 15:23	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/13/23 15:23	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/13/23 15:23	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/13/23 15:23	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/13/23 15:23	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/13/23 15:23	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/13/23 15:23	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/13/23 15:23	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/13/23 15:23	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/13/23 15:23	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/13/23 15:23	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/13/23 15:23	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/13/23 15:23	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/13/23 15:23	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/13/23 15:23	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:23	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/13/23 15:23	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/13/23 15:23	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:23	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:23	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/13/23 15:23	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/13/23 15:23	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/13/23 15:23	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/13/23 15:23	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/13/23 15:23	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/13/23 15:23	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/13/23 15:23	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/13/23 15:23	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/13/23 15:23	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/13/23 15:23	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/13/23 15:23	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/13/23 15:23	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/13/23 15:23	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/13/23 15:23	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/13/23 15:23	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/13/23 15:23	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/13/23 15:23	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/13/23 15:23	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/13/23 15:23	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/13/23 15:23	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/13/23 15:23	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/13/23 15:23	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/13/23 15:23	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/13/23 15:23	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/13/23 15:23	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/13/23 15:23	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/13/23 15:23	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29354-1

Date Collected: 06/09/23 10:25

Matrix: Water

Date Received: 06/09/23 15:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:23	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/13/23 15:23	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/13/23 15:23	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/13/23 15:23	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/13/23 15:23	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/13/23 15:23	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/13/23 15:23	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/13/23 15:23	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/13/23 15:23	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/13/23 15:23	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/13/23 15:23	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/13/23 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		74 - 124		06/13/23 15:23	1
Dibromofluoromethane (Surr)	94		75 - 131		06/13/23 15:23	1
1,2-Dichloroethane-d4 (Surr)	96		63 - 144		06/13/23 15:23	1
Toluene-d8 (Surr)	104		80 - 120		06/13/23 15:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2.21	J	4.76	0.941 mg/L			06/19/23 18:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.941	U	4.76	0.941 mg/L		06/15/23 16:14	06/16/23 00:32	1
Diesel Range Organics (Over C10-C28)	2.21	J	4.76	0.941 mg/L		06/15/23 16:14	06/16/23 00:32	1
Oil Range Organics (Over C28-C36)	<0.908	U	4.76	0.908 mg/L		06/15/23 16:14	06/16/23 00:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 135			06/15/23 16:14	06/16/23 00:32	1
o-Terphenyl	115		70 - 135			06/15/23 16:14	06/16/23 00:32	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.5		0.500	0.250 mg/L			06/13/23 10:59	1
Nitrate as N	0.149	H	0.100	0.0391 mg/L			06/13/23 10:59	1
Fluoride	0.291	J	0.500	0.100 mg/L			06/13/23 10:59	1
Nitrite as N	0.158	H	0.100	0.0293 mg/L			06/13/23 10:59	1
Sulfate	21.0		0.500	0.200 mg/L			06/13/23 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	823		4.00	4.00 mg/L			06/14/23 15:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	823		4.00	4.00 mg/L			06/14/23 15:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/14/23 15:08	1
Carbon dioxide (SM 4500 CO2 D)	889			mg/L			06/13/23 08:47	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-29354-1

Client Sample ID: MW-1

Lab Sample ID: 880-29354-1

Date Collected: 06/09/23 10:25

Matrix: Water

Date Received: 06/09/23 15:49

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide, Free (SM 4500 CO2 D)	165			mg/L			06/13/23 08:47	1
pH (SM 4500 H+ B)	7.0	HF		SU			06/13/23 15:36	1
Temperature (SM 4500 H+ B)	19.1	HF		Degrees C			06/13/23 15:36	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495 mg/L			06/13/23 10:11	1

Client Sample ID: MW-2

Lab Sample ID: 880-29354-2

Date Collected: 06/09/23 11:30

Matrix: Water

Date Received: 06/09/23 15:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0180		0.00100	0.000460 mg/L			06/13/23 15:42	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/13/23 15:42	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/13/23 15:42	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/13/23 15:42	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/13/23 15:42	1
Bromomethane	0.00336	J	0.00500	0.00142 mg/L			06/13/23 15:42	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/13/23 15:42	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/13/23 15:42	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/13/23 15:42	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/13/23 15:42	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/13/23 15:42	1
Chloromethane	0.00299	J	0.0100	0.00204 mg/L			06/13/23 15:42	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/13/23 15:42	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/13/23 15:42	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/13/23 15:42	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/13/23 15:42	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/13/23 15:42	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:42	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/13/23 15:42	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/13/23 15:42	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:42	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:42	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/13/23 15:42	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/13/23 15:42	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/13/23 15:42	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/13/23 15:42	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/13/23 15:42	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/13/23 15:42	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/13/23 15:42	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/13/23 15:42	1
Ethylbenzene	0.0196		0.00100	0.000411 mg/L			06/13/23 15:42	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/13/23 15:42	1
Isopropylbenzene	0.0114		0.00100	0.000613 mg/L			06/13/23 15:42	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/13/23 15:42	1
m,p-Xylenes	0.0666		0.0100	0.00124 mg/L			06/13/23 15:42	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/13/23 15:42	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/13/23 15:42	1
n-Butylbenzene	0.00104		0.00100	0.000644 mg/L			06/13/23 15:42	1

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Client Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-29354-2

Date Collected: 06/09/23 11:30

Matrix: Water

Date Received: 06/09/23 15:49

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	0.00349		0.00100	0.000498 mg/L			06/13/23 15:42	1
o-Xylene	0.0129		0.00100	0.000551 mg/L			06/13/23 15:42	1
p-Cymene (p-Isopropyltoluene)	0.00115		0.00100	0.000919 mg/L			06/13/23 15:42	1
sec-Butylbenzene	0.00151		0.00100	0.000468 mg/L			06/13/23 15:42	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/13/23 15:42	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/13/23 15:42	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/13/23 15:42	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/13/23 15:42	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/13/23 15:42	1
Toluene	0.00256		0.00100	0.000475 mg/L			06/13/23 15:42	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/13/23 15:42	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:42	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/13/23 15:42	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/13/23 15:42	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/13/23 15:42	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/13/23 15:42	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/13/23 15:42	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/13/23 15:42	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/13/23 15:42	1
1,2,4-Trimethylbenzene	0.0433		0.00100	0.000417 mg/L			06/13/23 15:42	1
1,3,5-Trimethylbenzene	0.0105		0.00100	0.000456 mg/L			06/13/23 15:42	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/13/23 15:42	1
Xylenes, Total	0.0795		0.0100	0.00124 mg/L			06/13/23 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		74 - 124		06/13/23 15:42	1
Dibromofluoromethane (Surr)	98		75 - 131		06/13/23 15:42	1
1,2-Dichloroethane-d4 (Surr)	94		63 - 144		06/13/23 15:42	1
Toluene-d8 (Surr)	103		80 - 120		06/13/23 15:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.9		4.92	0.972 mg/L			06/19/23 18:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.82	J	4.92	0.972 mg/L		06/15/23 16:14	06/19/23 16:03	1
Diesel Range Organics (Over C10-C28)	12.8		4.92	0.972 mg/L		06/15/23 16:14	06/19/23 16:03	1
Oil Range Organics (Over C28-C36)	2.28	J	4.92	0.938 mg/L		06/15/23 16:14	06/19/23 16:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 135	06/15/23 16:14	06/19/23 16:03	1
o-Terphenyl	122		70 - 135	06/15/23 16:14	06/19/23 16:03	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.4		0.500	0.250 mg/L			06/13/23 11:14	1
Nitrate as N	0.245	H	0.100	0.0391 mg/L			06/13/23 11:14	1

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Client Sample Results

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

Job ID: 880-29354-1

Client Sample ID: MW-2
Date Collected: 06/09/23 11:30
Date Received: 06/09/23 15:49

Lab Sample ID: 880-29354-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.129	J	0.500	0.100	mg/L			06/13/23 11:14	1
Nitrite as N	0.720	H	0.100	0.0293	mg/L			06/13/23 11:14	1
Sulfate	87.1		0.500	0.200	mg/L			06/13/23 11:14	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	1310		4.00	4.00	mg/L			06/14/23 15:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	1310		4.00	4.00	mg/L			06/14/23 15:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			06/14/23 15:25	1
Carbon dioxide (SM 4500 CO2 D)	2200				mg/L			06/13/23 08:47	1
Carbon Dioxide, Free (SM 4500 CO2 D)	1050				mg/L			06/13/23 08:47	1
pH (SM 4500 H+ B)	6.4	HF			SU			06/13/23 15:38	1
Temperature (SM 4500 H+ B)	18.6	HF			Degrees C			06/13/23 15:38	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495	mg/L			06/13/23 10:11	1

Surrogate Summary

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

Job ID: 880-29354-1

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 (80-120)
880-29354-1	MW-1	107	94	96	104
880-29354-2	MW-2	104	98	94	103
LCS 860-107490/1010	Lab Control Sample	100	97	93	98
LCSD 860-107490/11	Lab Control Sample Dup	99	98	88	98
MB 860-107490/16	Method Blank	106	100	96	104

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)
880-29354-1	MW-1	99	115
880-29354-2	MW-2	118	122
LCS 860-108039/2-A	Lab Control Sample	102	115
LCSD 860-108039/3-A	Lab Control Sample Dup	102	116
MB 860-108039/1-A	Method Blank	101	121

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-107490/16

Matrix: Water

Analysis Batch: 107490

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/13/23 15:04	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/13/23 15:04	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/13/23 15:04	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/13/23 15:04	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/13/23 15:04	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/13/23 15:04	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/13/23 15:04	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/13/23 15:04	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/13/23 15:04	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/13/23 15:04	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/13/23 15:04	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/13/23 15:04	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/13/23 15:04	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/13/23 15:04	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/13/23 15:04	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/13/23 15:04	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/13/23 15:04	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:04	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/13/23 15:04	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/13/23 15:04	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:04	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/13/23 15:04	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/13/23 15:04	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/13/23 15:04	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/13/23 15:04	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/13/23 15:04	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/13/23 15:04	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/13/23 15:04	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/13/23 15:04	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/13/23 15:04	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/13/23 15:04	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/13/23 15:04	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/13/23 15:04	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/13/23 15:04	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/13/23 15:04	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/13/23 15:04	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/13/23 15:04	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/13/23 15:04	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/13/23 15:04	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/13/23 15:04	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/13/23 15:04	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/13/23 15:04	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/13/23 15:04	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/13/23 15:04	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/13/23 15:04	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/13/23 15:04	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/13/23 15:04	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/13/23 15:04	1

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QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-107490/16

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 107490

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			06/13/23 15:04	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/13/23 15:04	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/13/23 15:04	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/13/23 15:04	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/13/23 15:04	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/13/23 15:04	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/13/23 15:04	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/13/23 15:04	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/13/23 15:04	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/13/23 15:04	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/13/23 15:04	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/13/23 15:04	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/13/23 15:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		74 - 124		06/13/23 15:04	1
Dibromofluoromethane (Surr)	100		75 - 131		06/13/23 15:04	1
1,2-Dichloroethane-d4 (Surr)	96		63 - 144		06/13/23 15:04	1
Toluene-d8 (Surr)	104		80 - 120		06/13/23 15:04	1

Lab Sample ID: LCS 860-107490/1010

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 107490

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05004		mg/L		100	75 - 125
Bromobenzene	0.0500	0.04849		mg/L		97	75 - 125
Bromochloromethane	0.0500	0.04896		mg/L		98	60 - 140
Bromodichloromethane	0.0500	0.05071		mg/L		101	75 - 125
Bromoform	0.0500	0.04438		mg/L		89	70 - 130
Bromomethane	0.0500	0.04913		mg/L		98	60 - 140
2-Butanone	0.250	0.2304		mg/L		92	60 - 140
Carbon tetrachloride	0.0500	0.04175		mg/L		83	70 - 130
Chlorobenzene	0.0500	0.04800		mg/L		96	65 - 135
Chloroethane	0.0500	0.03946		mg/L		79	60 - 140
Chloroform	0.0500	0.04803		mg/L		96	70 - 121
Chloromethane	0.0500	0.04628		mg/L		93	60 - 140
2-Chlorotoluene	0.0500	0.04849		mg/L		97	73 - 125
4-Chlorotoluene	0.0500	0.04830		mg/L		97	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04616		mg/L		92	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05150		mg/L		103	74 - 125
Dibromochloromethane	0.0500	0.05184		mg/L		104	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05381		mg/L		108	59 - 125
1,2-Dibromoethane	0.0500	0.04915		mg/L		98	73 - 125
1,2-Dichlorobenzene	0.0500	0.04877		mg/L		98	75 - 125
1,3-Dichlorobenzene	0.0500	0.04858		mg/L		97	75 - 125
1,4-Dichlorobenzene	0.0500	0.04842		mg/L		97	75 - 125
Dichlorodifluoromethane	0.0500	0.04701		mg/L		94	50 - 150

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QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-107490/1010

Matrix: Water

Analysis Batch: 107490

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	0.05042		mg/L		101	70 - 130
1,2-Dichloroethane	0.0500	0.04434		mg/L		89	72 - 130
1,1-Dichloroethene	0.0500	0.04890		mg/L		98	50 - 150
1,2-Dichloropropane	0.0500	0.05128		mg/L		103	74 - 125
1,3-Dichloropropane	0.0500	0.04862		mg/L		97	75 - 125
2,2-Dichloropropane	0.0500	0.04646		mg/L		93	75 - 125
1,1-Dichloropropene	0.0500	0.04322		mg/L		86	75 - 125
Ethylbenzene	0.0500	0.04920		mg/L		98	75 - 125
Hexachlorobutadiene	0.0500	0.04864		mg/L		97	75 - 125
Isopropylbenzene	0.0500	0.04964		mg/L		99	75 - 125
Methylene Chloride	0.0500	0.04597		mg/L		92	71 - 125
m,p-Xylenes	0.0500	0.04900		mg/L		98	75 - 125
MTBE	0.0500	0.04917		mg/L		98	65 - 135
Naphthalene	0.0500	0.05018		mg/L		100	70 - 130
n-Butylbenzene	0.0500	0.04929		mg/L		99	75 - 125
N-Propylbenzene	0.0500	0.04952		mg/L		99	75 - 125
o-Xylene	0.0500	0.04933		mg/L		99	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05016		mg/L		100	75 - 125
sec-Butylbenzene	0.0500	0.04924		mg/L		98	75 - 125
Styrene	0.0500	0.05076		mg/L		102	75 - 125
tert-Butylbenzene	0.0500	0.04999		mg/L		100	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05020		mg/L		100	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05105		mg/L		102	74 - 125
Tetrachloroethene	0.0500	0.04931		mg/L		99	71 - 125
Toluene	0.0500	0.04815		mg/L		96	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04729		mg/L		95	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05052		mg/L		101	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04941		mg/L		99	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04862		mg/L		97	75 - 135
1,1,1-Trichloroethane	0.0500	0.04938		mg/L		99	70 - 130
1,1,2-Trichloroethane	0.0500	0.05076		mg/L		102	70 - 130
Trichloroethene	0.0500	0.04960		mg/L		99	75 - 135
Trichlorofluoromethane	0.0500	0.04866		mg/L		97	60 - 140
1,2,3-Trichloropropane	0.0500	0.05138		mg/L		103	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04938		mg/L		99	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04808		mg/L		96	60 - 140
Vinyl chloride	0.0500	0.05186		mg/L		104	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	97		75 - 131
1,2-Dichloroethane-d4 (Surr)	93		63 - 144
Toluene-d8 (Surr)	98		80 - 120

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-107490/11

Matrix: Water

Analysis Batch: 107490

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.05363		mg/L		107	75 - 125	7	25
Bromobenzene	0.0500	0.05148		mg/L		103	75 - 125	6	25
Bromochloromethane	0.0500	0.05367		mg/L		107	60 - 140	9	25
Bromodichloromethane	0.0500	0.05470		mg/L		109	75 - 125	8	25
Bromoform	0.0500	0.04877		mg/L		98	70 - 130	9	25
Bromomethane	0.0500	0.05393		mg/L		108	60 - 140	9	25
2-Butanone	0.250	0.2565		mg/L		103	60 - 140	11	25
Carbon tetrachloride	0.0500	0.04363		mg/L		87	70 - 130	4	25
Chlorobenzene	0.0500	0.05203		mg/L		104	65 - 135	8	25
Chloroethane	0.0500	0.03800		mg/L		76	60 - 140	4	25
Chloroform	0.0500	0.05152		mg/L		103	70 - 121	7	25
Chloromethane	0.0500	0.04778		mg/L		96	60 - 140	3	25
2-Chlorotoluene	0.0500	0.05218		mg/L		104	73 - 125	7	25
4-Chlorotoluene	0.0500	0.05153		mg/L		103	74 - 125	6	25
cis-1,2-Dichloroethene	0.0500	0.04938		mg/L		99	75 - 125	7	25
cis-1,3-Dichloropropene	0.0500	0.05459		mg/L		109	74 - 125	6	25
Dibromochloromethane	0.0500	0.05583		mg/L		112	73 - 125	7	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05823		mg/L		116	59 - 125	8	25
1,2-Dibromoethane	0.0500	0.05375		mg/L		107	73 - 125	9	25
1,2-Dichlorobenzene	0.0500	0.05216		mg/L		104	75 - 125	7	25
1,3-Dichlorobenzene	0.0500	0.05115		mg/L		102	75 - 125	5	25
1,4-Dichlorobenzene	0.0500	0.05188		mg/L		104	75 - 125	7	25
Dichlorodifluoromethane	0.0500	0.05011		mg/L		100	50 - 150	6	25
1,1-Dichloroethane	0.0500	0.05450		mg/L		109	70 - 130	8	25
1,2-Dichloroethane	0.0500	0.04962		mg/L		99	72 - 130	11	25
1,1-Dichloroethene	0.0500	0.05210		mg/L		104	50 - 150	6	25
1,2-Dichloropropane	0.0500	0.05557		mg/L		111	74 - 125	8	25
1,3-Dichloropropane	0.0500	0.05239		mg/L		105	75 - 125	7	25
2,2-Dichloropropane	0.0500	0.05391		mg/L		108	75 - 125	15	25
1,1-Dichloropropene	0.0500	0.04464		mg/L		89	75 - 125	3	25
Ethylbenzene	0.0500	0.05298		mg/L		106	75 - 125	7	25
Hexachlorobutadiene	0.0500	0.05117		mg/L		102	75 - 125	5	25
Isopropylbenzene	0.0500	0.05305		mg/L		106	75 - 125	7	25
Methylene Chloride	0.0500	0.04814		mg/L		96	71 - 125	5	25
m,p-Xylenes	0.0500	0.05240		mg/L		105	75 - 125	7	25
MTBE	0.0500	0.05742		mg/L		115	65 - 135	15	25
Naphthalene	0.0500	0.05614		mg/L		112	70 - 130	11	25
n-Butylbenzene	0.0500	0.05266		mg/L		105	75 - 125	7	25
N-Propylbenzene	0.0500	0.05260		mg/L		105	75 - 125	6	25
o-Xylene	0.0500	0.05245		mg/L		105	75 - 125	6	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05368		mg/L		107	75 - 125	7	25
sec-Butylbenzene	0.0500	0.05256		mg/L		105	75 - 125	7	25
Styrene	0.0500	0.05423		mg/L		108	75 - 125	7	25
tert-Butylbenzene	0.0500	0.05315		mg/L		106	75 - 125	6	25
1,1,1,2-Tetrachloroethane	0.0500	0.05416		mg/L		108	72 - 125	8	25
1,1,2,2-Tetrachloroethane	0.0500	0.05462		mg/L		109	74 - 125	7	25
Tetrachloroethene	0.0500	0.05382		mg/L		108	71 - 125	9	25
Toluene	0.0500	0.05191		mg/L		104	70 - 130	8	25

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-107490/11

Matrix: Water

Analysis Batch: 107490

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	0.05468		mg/L		109	75 - 125	14	25
trans-1,3-Dichloropropene	0.0500	0.05410		mg/L		108	66 - 125	7	25
1,2,3-Trichlorobenzene	0.0500	0.05482		mg/L		110	75 - 137	10	25
1,2,4-Trichlorobenzene	0.0500	0.05440		mg/L		109	75 - 135	11	25
1,1,1-Trichloroethane	0.0500	0.05329		mg/L		107	70 - 130	8	25
1,1,2-Trichloroethane	0.0500	0.05444		mg/L		109	70 - 130	7	25
Trichloroethene	0.0500	0.05217		mg/L		104	75 - 135	5	25
Trichlorofluoromethane	0.0500	0.05068		mg/L		101	60 - 140	4	25
1,2,3-Trichloropropane	0.0500	0.05487		mg/L		110	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.05172		mg/L		103	75 - 125	5	25
1,3,5-Trimethylbenzene	0.0500	0.05199		mg/L		104	60 - 140	8	25
Vinyl chloride	0.0500	0.05397		mg/L		108	60 - 140	4	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	88		63 - 144
Toluene-d8 (Surr)	98		80 - 120

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

Lab Sample ID: MB 860-108039/1-A

Matrix: Water

Analysis Batch: 107999

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108039

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		06/15/23 16:14	06/15/23 23:52	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		06/15/23 16:14	06/15/23 23:52	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		06/15/23 16:14	06/15/23 23:52	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 135	06/15/23 16:14	06/15/23 23:52	1
o-Terphenyl	121		70 - 135	06/15/23 16:14	06/15/23 23:52	1

Lab Sample ID: LCS 860-108039/2-A

Matrix: Water

Analysis Batch: 107999

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.8	126.6		mg/L		127	70 - 135
Diesel Range Organics (Over C10-C28)	99.6	109.7		mg/L		110	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
1-Chlorooctane	102		70 - 135
o-Terphenyl	115		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-108039/3-A

Matrix: Water

Analysis Batch: 107999

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108039

Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
			Added	Result	Qualifier			Limits	Limit		
Gasoline Range Organics (GRO)-C6-C10			99.8	126.2		mg/L		126	70 - 135	0	35
Diesel Range Organics (Over C10-C28)			99.6	109.3		mg/L		110	70 - 135	0	35
Surrogate	LCSD		Limits								
	%Recovery	Qualifier									
1-Chlorooctane	102		70 - 135								
o-Terphenyl	116		70 - 135								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-107354/3

Matrix: Water

Analysis Batch: 107354

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<0.250	U	0.500	0.250 mg/L			06/12/23 15:52	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/12/23 15:52	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/12/23 15:52	1

Lab Sample ID: MB 860-107354/54

Matrix: Water

Analysis Batch: 107354

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<0.250	U	0.500	0.250 mg/L			06/13/23 06:45	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/13/23 06:45	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/13/23 06:45	1

Lab Sample ID: LCS 860-107354/4

Matrix: Water

Analysis Batch: 107354

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	9.996		mg/L		100	90 - 110
Fluoride	10.0	10.16		mg/L		102	90 - 110
Sulfate	10.0	10.39		mg/L		104	90 - 110

Lab Sample ID: LCS 860-107354/55

Matrix: Water

Analysis Batch: 107354

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	9.996		mg/L		100	90 - 110
Fluoride	10.0	10.24		mg/L		102	90 - 110
Sulfate	10.0	9.885		mg/L		99	90 - 110

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QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-107354/5

Matrix: Water

Analysis Batch: 107354

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier			Limits	Limit		
Chloride	10.0	10.02		mg/L		100	90 - 110	0	20
Fluoride	10.0	10.22		mg/L		102	90 - 110	1	20
Sulfate	10.0	10.38		mg/L		104	90 - 110	0	20

Lab Sample ID: LCSD 860-107354/56

Matrix: Water

Analysis Batch: 107354

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
Chloride	10.0	10.00		mg/L		100	90 - 110	0	20
Fluoride	10.0	10.27		mg/L		103	90 - 110	0	20
Sulfate	10.0	9.907		mg/L		99	90 - 110	0	20

Lab Sample ID: LLCS 860-107354/7

Matrix: Water

Analysis Batch: 107354

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	0.5956		mg/L		119	50 - 150	
Fluoride	0.500	0.5582		mg/L		112	50 - 150	
Sulfate	0.500	0.5413		mg/L		108	50 - 150	

Lab Sample ID: MB 860-107355/3

Matrix: Water

Analysis Batch: 107355

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			06/12/23 15:52	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			06/12/23 15:52	1

Lab Sample ID: MB 860-107355/54

Matrix: Water

Analysis Batch: 107355

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			06/13/23 06:45	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			06/13/23 06:45	1

Lab Sample ID: LCS 860-107355/4

Matrix: Water

Analysis Batch: 107355

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	10.06		mg/L		101	80 - 120	
Nitrite as N	10.0	9.592		mg/L		96	80 - 120	

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QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-107355/55

Matrix: Water

Analysis Batch: 107355

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	10.03		mg/L		100	80 - 120
Nitrite as N	10.0	9.618		mg/L		96	80 - 120

Lab Sample ID: LCSD 860-107355/5

Matrix: Water

Analysis Batch: 107355

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	10.06		mg/L		101	80 - 120	0	20
Nitrite as N	10.0	9.655		mg/L		97	80 - 120	1	20

Lab Sample ID: LCSD 860-107355/56

Matrix: Water

Analysis Batch: 107355

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	10.03		mg/L		100	80 - 120	0	20
Nitrite as N	10.0	9.651		mg/L		97	80 - 120	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-107794/3

Matrix: Water

Analysis Batch: 107794

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			06/14/23 11:12	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/14/23 11:12	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/14/23 11:12	1

Lab Sample ID: LCS 860-107794/4

Matrix: Water

Analysis Batch: 107794

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	255.7		mg/L		102	85 - 115

Lab Sample ID: LCSD 860-107794/5

Matrix: Water

Analysis Batch: 107794

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	256.5		mg/L		103	85 - 115	0	20

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QC Sample Results

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-29354-2 DU

Matrix: Water

Analysis Batch: 107594

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.4	HF	6.4		SU		0.2	20
Temperature	18.6	HF	18.4		Degrees C		1	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-107503/1

Matrix: Water

Analysis Batch: 107503

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			06/13/23 10:11	1

Lab Sample ID: LCS 860-107503/2

Matrix: Water

Analysis Batch: 107503

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	43.00		mg/L		86	80 - 120

Lab Sample ID: LCSD 860-107503/3

Matrix: Water

Analysis Batch: 107503

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	43.00		mg/L		86	80 - 120	0	20

Lab Sample ID: 880-29354-2 MS

Matrix: Water

Analysis Batch: 107503

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	<0.495	U	50.0	40.20		mg/L		80	80 - 120

Lab Sample ID: 880-29354-2 MSD

Matrix: Water

Analysis Batch: 107503

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	<0.495	U	50.0	40.20		mg/L		80	80 - 120	0	20

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QC Association Summary

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 107490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	8260C	
880-29354-2	MW-2	Total/NA	Water	8260C	
MB 860-107490/16	Method Blank	Total/NA	Water	8260C	
LCS 860-107490/1010	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-107490/11	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 101425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	8015 NM	
880-29354-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 107999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	8015B NM	108039
MB 860-108039/1-A	Method Blank	Total/NA	Water	8015B NM	108039
LCS 860-108039/2-A	Lab Control Sample	Total/NA	Water	8015B NM	108039
LCSD 860-108039/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	108039

Prep Batch: 108039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-29354-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-108039/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-108039/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-108039/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 108459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-2	MW-2	Total/NA	Water	8015B NM	108039

HPLC/IC

Analysis Batch: 107354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	300.0	
880-29354-2	MW-2	Total/NA	Water	300.0	
MB 860-107354/3	Method Blank	Total/NA	Water	300.0	
MB 860-107354/54	Method Blank	Total/NA	Water	300.0	
LCS 860-107354/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-107354/55	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-107354/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-107354/56	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-107354/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 107355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	300.0	
880-29354-2	MW-2	Total/NA	Water	300.0	
MB 860-107355/3	Method Blank	Total/NA	Water	300.0	
MB 860-107355/54	Method Blank	Total/NA	Water	300.0	

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-29354-1

Project/Site: South Hobbs - 03B1417002

HPLC/IC (Continued)

Analysis Batch: 107355 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-107355/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-107355/55	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-107355/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-107355/56	Lab Control Sample Dup	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 107463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-29354-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Analysis Batch: 107503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-29354-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-107503/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-107503/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-107503/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-29354-2 MS	MW-2	Total/NA	Water	SM 4500 S2 F	
880-29354-2 MSD	MW-2	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 107594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-29354-2	MW-2	Total/NA	Water	SM 4500 H+ B	
880-29354-2 DU	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 107794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29354-1	MW-1	Total/NA	Water	SM 2320B	
880-29354-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-107794/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-107794/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-107794/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Eurofins Midland

Lab Chronicle

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-29354-1

Client Sample ID: MW-1

Date Collected: 06/09/23 10:25

Date Received: 06/09/23 15:49

Lab Sample ID: 880-29354-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	107490	NA	EET HOU	06/13/23 15:23
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/19/23 18:11
Total/NA	Prep	8015NM Aq Prep			108039	MCA	EET HOU	06/15/23 16:14
Total/NA	Analysis	8015B NM		1	107999	T1S	EET HOU	06/16/23 00:32
Total/NA	Analysis	300.0		1	107354	WP	EET HOU	06/13/23 10:59
Total/NA	Analysis	300.0		1	107355	WP	EET HOU	06/13/23 10:59
Total/NA	Analysis	SM 2320B		1	107794	TL	EET HOU	06/14/23 15:08
Total/NA	Analysis	SM 4500 CO2 D		1	107463	SC	EET HOU	06/13/23 08:47
Total/NA	Analysis	SM 4500 H+ B		1	107594	TL	EET HOU	06/13/23 15:36
Total/NA	Analysis	SM 4500 S2 F		1	107503	SCI	EET HOU	06/13/23 10:11

Client Sample ID: MW-2

Date Collected: 06/09/23 11:30

Date Received: 06/09/23 15:49

Lab Sample ID: 880-29354-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	107490	NA	EET HOU	06/13/23 15:42
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/19/23 18:11
Total/NA	Prep	8015NM Aq Prep			108039	MCA	EET HOU	06/15/23 16:14
Total/NA	Analysis	8015B NM		1	108459	MCA	EET HOU	06/19/23 16:03
Total/NA	Analysis	300.0		1	107354	WP	EET HOU	06/13/23 11:14
Total/NA	Analysis	300.0		1	107355	WP	EET HOU	06/13/23 11:14
Total/NA	Analysis	SM 2320B		1	107794	TL	EET HOU	06/14/23 15:25
Total/NA	Analysis	SM 4500 CO2 D		1	107463	SC	EET HOU	06/13/23 08:47
Total/NA	Analysis	SM 4500 H+ B		1	107594	TL	EET HOU	06/13/23 15:38
Total/NA	Analysis	SM 4500 S2 F		1	107503	SCI	EET HOU	06/13/23 10:11

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: 880-29354-1

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	T104704215-23-50	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: 880-29354-1

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	EPA	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:
EPA = US Environmental Protection Agency
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: 880-29354-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-29354-1	MW-1	Water	06/09/23 10:25	06/09/23 15:49
880-29354-2	MW-2	Water	06/09/23 11:30	06/09/23 15:49

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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)

Work Order No: 29354

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

Work Order Comments	
Program: UST/PST	☐ PRP ☐ 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 los:	Yes ☐ No ☒
Temperature (°C):	4.0/14.3	Thermometer ID			
Received Intact:	Yes ☒ No ☐	Correction Factor:			
Cooler Custody Seals:	Yes ☐ No ☒ N/A	Total Containers:	2		
Sample Custody Seals:	Yes ☐ No ☒ N/A				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	
MW-1	GW	6-9-23	1025	-	
MW-2	GW	6-9-23	1130	-	
Number of Containers					
Dissolved 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					
TAT starts the day received by the lab, if received by 4 30pm					
Sample Comments					24 Hr



Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn		
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 Hg		
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.					
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [Signature]	[Signature]	6/9/23	2 [Signature]		
3 [Signature]		1549	4		
5			6		

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

Chain of Custody Record



Environmental 125 12

Client Information (Sub Contract Lab)				Carrier Tracking No(s): 880-7183.1 State of Origin: New Mexico Page 1 of 1	
Client Contact: Jessica Kramer E-Mail: Jessica.Kramer@et.eurofins.com Phone: 880-29354-1 Accreditations Required (See note): NELAP, Texas				Lab PM: Jessica Kramer E-Mail: Jessica.Kramer@et.eurofins.com Phone: 880-29354-1	
Company: Eurofins Environment Testing South Central Address: 614145 Greenbriar Dr City: Stafford State, Zip: TX, 77477 Phone: 281-240-4200(Tel) Email: 880-29354-1				Job #: 880-29354-1 Preservation Codes: A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Anchor H Ascorbic Acid I Ice J DI Water K EDTA L EDA M Hexane N None O AsNaO2 P Na2O4S Q Na2SO3 R Na2S2O3 S H2SO4 T TSP Dodecylhydrate U Acetone V MCAA W pH 4-5 Y Trizma Z other (specify)	
Date Requested: 6/13/2023 TAT Requested (days): 7				Analysis Requested 8016MOD_NM8016NM_Aq_Prep (MOD) Full TPH 8260C/8030C (MOD) Full List VOCs SMA500_S2_Pi Sulfide, Total SMA500_H+ SMA500_CO2 DI (MOD) Carbon Dioxide Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No)	
PO #: 68000023 IWO #: 68000023 Project #: 68000023 SSOW#: 68000023				Total Number of Containers: 7 Special Instructions/Note: DISSOLVED SULFIDE DISSOLVED SULFIDE	
Sample Identification Client ID (Lab ID) MW-1 (880-29354-1) MW-2 (880-29354-2)				Sample Date 6/9/23 6/9/23	
Sample Type C=Comp, G=grab Matrix (W=water, S=solid, O=overhead, I=In-Tissue, A=Air) Preservation Code: 10:25 Mountain 11:30 Mountain				Sample Time 10:25 Mountain 11:30 Mountain	
Date: 6/13/2023 Time: 10:25 Date: 6/13/2023 Time: 11:30				Date: 6/13/2023 Time: 10:25 Date: 6/13/2023 Time: 11:30	
Date: 6/13/2023 Time: 10:25 Date: 6/13/2023 Time: 11:30				Date: 6/13/2023 Time: 10:25 Date: 6/13/2023 Time: 11:30	
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Date: 6/13/2023 Time: 10:25 Date: 6/13/2023 Time: 11:30					

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29354-1

Login Number: 29354

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29354-1

Login Number: 29354

List Number: 2

Creator: Pena, Jesiel

List Source: Eurofins Houston

List Creation: 06/10/23 02:58 PM

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



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/26/2023 5:19:16 PM

JOB DESCRIPTION

South Hobbs - 03B1417002
South Hobbs

JOB NUMBER

880-29607-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/26/2023 5:19:16 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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

Laboratory Job ID: 880-29607-1

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Definitions/Glossary

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

Job ID: 880-29607-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

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.
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: 880-29607-1

Job ID: 880-29607-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-29607-1****Receipt**

The samples were received on 6/15/2023 3:22 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 6.6°C

GC/MS VOA

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 860-108371 were outside control limits: (880-29607-C-1 MS). 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.

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-108212 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recovery was within acceptance limits.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-108212 contained Fluoride greater than the method detection limit (MDL), and were not reanalyzed because this target analyte concentration was less than the reporting limit (RL). The data have been qualified and reported.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-108212 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFMS: The instrument blank/CCB for analytical batch 860-108213 contained Nitrite as N greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

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: 880-29607-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29607-1

Date Collected: 06/15/23 11:10

Matrix: Water

Date Received: 06/15/23 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/18/23 19:43	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/18/23 19:43	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/18/23 19:43	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/18/23 19:43	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/18/23 19:43	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/18/23 19:43	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/18/23 19:43	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/18/23 19:43	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/18/23 19:43	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/18/23 19:43	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/18/23 19:43	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/18/23 19:43	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/18/23 19:43	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/18/23 19:43	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/18/23 19:43	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/18/23 19:43	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/18/23 19:43	1
1,2-Dibromo-3-Chloropropane	<0.00127	U F1	0.00500	0.00127 mg/L			06/18/23 19:43	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/18/23 19:43	1
1,2-Dichlorobenzene	<0.000509	U F1	0.00100	0.000509 mg/L			06/18/23 19:43	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 19:43	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 19:43	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 19:43	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/18/23 19:43	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/18/23 19:43	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/18/23 19:43	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/18/23 19:43	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/18/23 19:43	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/18/23 19:43	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/18/23 19:43	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/18/23 19:43	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/18/23 19:43	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/18/23 19:43	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/18/23 19:43	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/18/23 19:43	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/18/23 19:43	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/18/23 19:43	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/18/23 19:43	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/18/23 19:43	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/18/23 19:43	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 19:43	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/18/23 19:43	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/18/23 19:43	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/18/23 19:43	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/18/23 19:43	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/18/23 19:43	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/18/23 19:43	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/18/23 19:43	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/18/23 19:43	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29607-1

Date Collected: 06/15/23 11:10

Matrix: Water

Date Received: 06/15/23 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 19:43	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/18/23 19:43	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/18/23 19:43	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/18/23 19:43	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/18/23 19:43	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/18/23 19:43	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/18/23 19:43	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/18/23 19:43	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/18/23 19:43	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/18/23 19:43	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/18/23 19:43	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/18/23 19:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		74 - 124		06/18/23 19:43	1
Dibromofluoromethane (Surr)	98		75 - 131		06/18/23 19:43	1
1,2-Dichloroethane-d4 (Surr)	100		63 - 144		06/18/23 19:43	1
Toluene-d8 (Surr)	102		80 - 120		06/18/23 19:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.935	U	4.73	0.935 mg/L			06/19/23 18:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.935	U	4.73	0.935 mg/L		06/22/23 16:24	06/23/23 16:21	1
Diesel Range Organics (Over C10-C28)	<0.935	U	4.73	0.935 mg/L		06/22/23 16:24	06/23/23 16:21	1
Oil Range Organics (Over C28-C36)	<0.902	U	4.73	0.902 mg/L		06/22/23 16:24	06/23/23 16:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 135			06/22/23 16:24	06/23/23 16:21	1
o-Terphenyl	114		70 - 135			06/22/23 16:24	06/23/23 16:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.7		0.500	0.250 mg/L			06/16/23 18:53	1
Nitrate as N	0.0846	J	0.100	0.0391 mg/L			06/16/23 18:53	1
Fluoride	0.451	J	0.500	0.100 mg/L			06/16/23 18:53	1
Nitrite as N	0.491		0.100	0.0293 mg/L			06/16/23 18:53	1
Sulfate	43.0		0.500	0.200 mg/L			06/16/23 18:53	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	667		4.00	4.00 mg/L			06/19/23 15:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	667		4.00	4.00 mg/L			06/19/23 15:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/19/23 15:25	1
Carbon dioxide (SM 4500 CO2 D)	754			mg/L			06/21/23 11:57	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29607-1

Date Collected: 06/15/23 11:10

Matrix: Water

Date Received: 06/15/23 15:22

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide, Free (SM 4500 CO2 D)	168			mg/L			06/21/23 11:57	1
pH (SM 4500 H+ B)	6.9	HF		SU			06/19/23 15:55	1
Temperature (SM 4500 H+ B)	20.2	HF		Degrees C			06/19/23 15:55	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495 mg/L			06/19/23 14:24	1

Client Sample ID: MW-2

Lab Sample ID: 880-29607-2

Date Collected: 06/15/23 12:05

Matrix: Water

Date Received: 06/15/23 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0123		0.00100	0.000460 mg/L			06/18/23 20:03	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/18/23 20:03	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/18/23 20:03	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/18/23 20:03	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/18/23 20:03	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/18/23 20:03	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/18/23 20:03	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/18/23 20:03	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/18/23 20:03	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/18/23 20:03	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/18/23 20:03	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/18/23 20:03	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/18/23 20:03	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/18/23 20:03	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/18/23 20:03	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/18/23 20:03	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/18/23 20:03	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 20:03	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/18/23 20:03	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/18/23 20:03	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 20:03	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 20:03	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 20:03	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/18/23 20:03	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/18/23 20:03	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/18/23 20:03	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/18/23 20:03	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/18/23 20:03	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/18/23 20:03	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/18/23 20:03	1
Ethylbenzene	0.0144		0.00100	0.000411 mg/L			06/18/23 20:03	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/18/23 20:03	1
Isopropylbenzene	0.00809		0.00100	0.000613 mg/L			06/18/23 20:03	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/18/23 20:03	1
m,p-Xylenes	0.0404		0.0100	0.00124 mg/L			06/18/23 20:03	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/18/23 20:03	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/18/23 20:03	1
n-Butylbenzene	0.000779	J	0.00100	0.000644 mg/L			06/18/23 20:03	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-29607-1

Client Sample ID: MW-2

Lab Sample ID: 880-29607-2

Date Collected: 06/15/23 12:05

Matrix: Water

Date Received: 06/15/23 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	0.00229		0.00100	0.000498 mg/L			06/18/23 20:03	1
o-Xylene	0.00962		0.00100	0.000551 mg/L			06/18/23 20:03	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 20:03	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/18/23 20:03	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/18/23 20:03	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/18/23 20:03	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/18/23 20:03	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/18/23 20:03	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/18/23 20:03	1
Toluene	0.00201		0.00100	0.000475 mg/L			06/18/23 20:03	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/18/23 20:03	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 20:03	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/18/23 20:03	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/18/23 20:03	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/18/23 20:03	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/18/23 20:03	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/18/23 20:03	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/18/23 20:03	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/18/23 20:03	1
1,2,4-Trimethylbenzene	0.0248		0.00100	0.000417 mg/L			06/18/23 20:03	1
1,3,5-Trimethylbenzene	0.00690		0.00100	0.000456 mg/L			06/18/23 20:03	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/18/23 20:03	1
Xylenes, Total	0.0500		0.0100	0.00124 mg/L			06/18/23 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		74 - 124		06/18/23 20:03	1
Dibromofluoromethane (Surr)	99		75 - 131		06/18/23 20:03	1
1,2-Dichloroethane-d4 (Surr)	98		63 - 144		06/18/23 20:03	1
Toluene-d8 (Surr)	102		80 - 120		06/18/23 20:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.50	J	4.57	0.904 mg/L			06/19/23 18:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.50	J	4.57	0.904 mg/L		06/22/23 16:24	06/23/23 16:42	1
Diesel Range Organics (Over C10-C28)	<0.904	U	4.57	0.904 mg/L		06/22/23 16:24	06/23/23 16:42	1
Oil Range Organics (Over C28-C36)	<0.872	U	4.57	0.872 mg/L		06/22/23 16:24	06/23/23 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 135	06/22/23 16:24	06/23/23 16:42	1
o-Terphenyl	111		70 - 135	06/22/23 16:24	06/23/23 16:42	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.0		0.500	0.250 mg/L			06/17/23 00:57	1
Nitrate as N	0.197		0.100	0.0391 mg/L			06/17/23 00:57	1
Fluoride	0.172	J	0.500	0.100 mg/L			06/17/23 00:57	1

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Client Sample Results

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

Job ID: 880-29607-1

Client Sample ID: MW-2
Date Collected: 06/15/23 12:05
Date Received: 06/15/23 15:22

Lab Sample ID: 880-29607-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	1.01		0.100	0.0293	mg/L			06/17/23 00:57	1
Sulfate	89.6		0.500	0.200	mg/L			06/17/23 00:57	1
General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	1310		4.00	4.00	mg/L			06/19/23 15:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	1310		4.00	4.00	mg/L			06/19/23 15:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			06/19/23 15:42	1
Carbon dioxide (SM 4500 CO2 D)	2200				mg/L			06/21/23 11:57	1
Carbon Dioxide, Free (SM 4500 CO2 D)	1050				mg/L			06/21/23 11:57	1
pH (SM 4500 H+ B)	6.4	HF			SU			06/19/23 15:58	1
Temperature (SM 4500 H+ B)	20.4	HF			Degrees C			06/19/23 15:58	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495	mg/L			06/19/23 14:24	1

Surrogate Summary

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

Job ID: 880-29607-1

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 (80-120)
880-29607-1	MW-1	103	98	100	102
880-29607-1 MS	MW-1	100	98	99	99
880-29607-2	MW-2	106	99	98	102
LCS 860-108371/1011	Lab Control Sample	100	101	98	99
LCSD 860-108371/12	Lab Control Sample Dup	101	100	99	99
MB 860-108371/17	Method Blank	102	97	99	104
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)
880-29607-1	MW-1	109	114
880-29607-2	MW-2	106	111
LCS 860-109176/2-A	Lab Control Sample	98	108
LCSD 860-109176/3-A	Lab Control Sample Dup	98	101
MB 860-109176/1-A	Method Blank	94	114
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-108371/17

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 108371

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/18/23 19:01	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/18/23 19:01	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/18/23 19:01	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/18/23 19:01	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/18/23 19:01	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/18/23 19:01	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/18/23 19:01	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/18/23 19:01	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/18/23 19:01	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/18/23 19:01	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/18/23 19:01	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/18/23 19:01	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/18/23 19:01	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/18/23 19:01	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/18/23 19:01	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/18/23 19:01	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/18/23 19:01	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 19:01	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/18/23 19:01	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/18/23 19:01	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 19:01	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/18/23 19:01	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 19:01	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/18/23 19:01	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/18/23 19:01	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/18/23 19:01	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/18/23 19:01	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/18/23 19:01	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/18/23 19:01	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/18/23 19:01	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/18/23 19:01	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/18/23 19:01	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/18/23 19:01	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/18/23 19:01	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/18/23 19:01	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/18/23 19:01	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/18/23 19:01	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/18/23 19:01	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/18/23 19:01	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/18/23 19:01	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/18/23 19:01	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/18/23 19:01	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/18/23 19:01	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/18/23 19:01	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/18/23 19:01	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/18/23 19:01	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/18/23 19:01	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/18/23 19:01	1

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-108371/17

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 108371

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			06/18/23 19:01	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/18/23 19:01	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/18/23 19:01	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/18/23 19:01	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/18/23 19:01	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/18/23 19:01	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/18/23 19:01	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/18/23 19:01	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/18/23 19:01	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/18/23 19:01	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/18/23 19:01	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/18/23 19:01	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/18/23 19:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		06/18/23 19:01	1
Dibromofluoromethane (Surr)	97		75 - 131		06/18/23 19:01	1
1,2-Dichloroethane-d4 (Surr)	99		63 - 144		06/18/23 19:01	1
Toluene-d8 (Surr)	104		80 - 120		06/18/23 19:01	1

Lab Sample ID: LCS 860-108371/1011

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 108371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05007		mg/L		100	75 - 125
Bromobenzene	0.0500	0.05171		mg/L		103	75 - 125
Bromochloromethane	0.0500	0.05108		mg/L		102	60 - 140
Bromodichloromethane	0.0500	0.05091		mg/L		102	75 - 125
Bromoform	0.0500	0.05467		mg/L		109	70 - 130
Bromomethane	0.0500	0.04726		mg/L		95	60 - 140
2-Butanone	0.250	0.2491		mg/L		100	60 - 140
Carbon tetrachloride	0.0500	0.04893		mg/L		98	70 - 130
Chlorobenzene	0.0500	0.05050		mg/L		101	65 - 135
Chloroethane	0.0500	0.05085		mg/L		102	60 - 140
Chloroform	0.0500	0.05165		mg/L		103	70 - 121
Chloromethane	0.0500	0.05134		mg/L		103	60 - 140
2-Chlorotoluene	0.0500	0.05022		mg/L		100	73 - 125
4-Chlorotoluene	0.0500	0.05147		mg/L		103	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05062		mg/L		101	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05170		mg/L		103	74 - 125
Dibromochloromethane	0.0500	0.05237		mg/L		105	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05277		mg/L		106	59 - 125
1,2-Dibromoethane	0.0500	0.05116		mg/L		102	73 - 125
1,2-Dichlorobenzene	0.0500	0.05072		mg/L		101	75 - 125
1,3-Dichlorobenzene	0.0500	0.05149		mg/L		103	75 - 125
1,4-Dichlorobenzene	0.0500	0.05002		mg/L		100	75 - 125
Dichlorodifluoromethane	0.0500	0.04770		mg/L		95	50 - 150

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-108371/1011

Matrix: Water

Analysis Batch: 108371

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	0.05017		mg/L		100	70 - 130
1,2-Dichloroethane	0.0500	0.05042		mg/L		101	72 - 130
1,1-Dichloroethene	0.0500	0.05027		mg/L		101	50 - 150
1,2-Dichloropropane	0.0500	0.04989		mg/L		100	74 - 125
1,3-Dichloropropane	0.0500	0.05072		mg/L		101	75 - 125
2,2-Dichloropropane	0.0500	0.04877		mg/L		98	75 - 125
1,1-Dichloropropene	0.0500	0.04985		mg/L		100	75 - 125
Ethylbenzene	0.0500	0.05067		mg/L		101	75 - 125
Hexachlorobutadiene	0.0500	0.05040		mg/L		101	75 - 125
Isopropylbenzene	0.0500	0.05827		mg/L		117	75 - 125
Methylene Chloride	0.0500	0.05185		mg/L		104	71 - 125
m,p-Xylenes	0.0500	0.05060		mg/L		101	75 - 125
MTBE	0.0500	0.05183		mg/L		104	65 - 135
Naphthalene	0.0500	0.05332		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05078		mg/L		102	75 - 125
N-Propylbenzene	0.0500	0.05129		mg/L		103	75 - 125
o-Xylene	0.0500	0.05148		mg/L		103	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05161		mg/L		103	75 - 125
sec-Butylbenzene	0.0500	0.05069		mg/L		101	75 - 125
Styrene	0.0500	0.05239		mg/L		105	75 - 125
tert-Butylbenzene	0.0500	0.05136		mg/L		103	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05233		mg/L		105	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05153		mg/L		103	74 - 125
Tetrachloroethene	0.0500	0.04916		mg/L		98	71 - 125
Toluene	0.0500	0.05040		mg/L		101	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05046		mg/L		101	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05156		mg/L		103	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05195		mg/L		104	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05262		mg/L		105	75 - 135
1,1,1-Trichloroethane	0.0500	0.05096		mg/L		102	70 - 130
1,1,2-Trichloroethane	0.0500	0.05069		mg/L		101	70 - 130
Trichloroethene	0.0500	0.05127		mg/L		103	75 - 135
Trichlorofluoromethane	0.0500	0.05074		mg/L		101	60 - 140
1,2,3-Trichloropropane	0.0500	0.05253		mg/L		105	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05135		mg/L		103	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05147		mg/L		103	60 - 140
Vinyl chloride	0.0500	0.05034		mg/L		101	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
Toluene-d8 (Surr)	99		80 - 120

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-108371/12

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 108371

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.04549		mg/L		91	75 - 125	10	25
Bromobenzene	0.0500	0.04821		mg/L		96	75 - 125	7	25
Bromochloromethane	0.0500	0.04650		mg/L		93	60 - 140	9	25
Bromodichloromethane	0.0500	0.04666		mg/L		93	75 - 125	9	25
Bromoform	0.0500	0.05098		mg/L		102	70 - 130	7	25
Bromomethane	0.0500	0.04323		mg/L		86	60 - 140	9	25
2-Butanone	0.250	0.2305		mg/L		92	60 - 140	8	25
Carbon tetrachloride	0.0500	0.04555		mg/L		91	70 - 130	7	25
Chlorobenzene	0.0500	0.04540		mg/L		91	65 - 135	11	25
Chloroethane	0.0500	0.05480		mg/L		110	60 - 140	7	25
Chloroform	0.0500	0.04628		mg/L		93	70 - 121	11	25
Chloromethane	0.0500	0.04575		mg/L		92	60 - 140	12	25
2-Chlorotoluene	0.0500	0.04582		mg/L		92	73 - 125	9	25
4-Chlorotoluene	0.0500	0.04708		mg/L		94	74 - 125	9	25
cis-1,2-Dichloroethene	0.0500	0.04573		mg/L		91	75 - 125	10	25
cis-1,3-Dichloropropene	0.0500	0.04736		mg/L		95	74 - 125	9	25
Dibromochloromethane	0.0500	0.04718		mg/L		94	73 - 125	10	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05154		mg/L		103	59 - 125	2	25
1,2-Dibromoethane	0.0500	0.04675		mg/L		94	73 - 125	9	25
1,2-Dichlorobenzene	0.0500	0.04712		mg/L		94	75 - 125	7	25
1,3-Dichlorobenzene	0.0500	0.04781		mg/L		96	75 - 125	7	25
1,4-Dichlorobenzene	0.0500	0.04630		mg/L		93	75 - 125	8	25
Dichlorodifluoromethane	0.0500	0.04337		mg/L		87	50 - 150	10	25
1,1-Dichloroethane	0.0500	0.04647		mg/L		93	70 - 130	8	25
1,2-Dichloroethane	0.0500	0.04691		mg/L		94	72 - 130	7	25
1,1-Dichloroethene	0.0500	0.04519		mg/L		90	50 - 150	11	25
1,2-Dichloropropane	0.0500	0.04548		mg/L		91	74 - 125	9	25
1,3-Dichloropropane	0.0500	0.04651		mg/L		93	75 - 125	9	25
2,2-Dichloropropane	0.0500	0.04291		mg/L		86	75 - 125	13	25
1,1-Dichloropropene	0.0500	0.04492		mg/L		90	75 - 125	10	25
Ethylbenzene	0.0500	0.04618		mg/L		92	75 - 125	9	25
Hexachlorobutadiene	0.0500	0.04836		mg/L		97	75 - 125	4	25
Isopropylbenzene	0.0500	0.05155		mg/L		103	75 - 125	12	25
Methylene Chloride	0.0500	0.04675		mg/L		93	71 - 125	10	25
m,p-Xylenes	0.0500	0.04637		mg/L		93	75 - 125	9	25
MTBE	0.0500	0.04733		mg/L		95	65 - 135	9	25
Naphthalene	0.0500	0.05471		mg/L		109	70 - 130	3	25
n-Butylbenzene	0.0500	0.04705		mg/L		94	75 - 125	8	25
N-Propylbenzene	0.0500	0.04736		mg/L		95	75 - 125	8	25
o-Xylene	0.0500	0.04572		mg/L		91	75 - 125	12	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04737		mg/L		95	75 - 125	9	25
sec-Butylbenzene	0.0500	0.04682		mg/L		94	75 - 125	8	25
Styrene	0.0500	0.04755		mg/L		95	75 - 125	10	25
tert-Butylbenzene	0.0500	0.04666		mg/L		93	75 - 125	10	25
1,1,1,2-Tetrachloroethane	0.0500	0.04715		mg/L		94	72 - 125	10	25
1,1,2,2-Tetrachloroethane	0.0500	0.04911		mg/L		98	74 - 125	5	25
Tetrachloroethene	0.0500	0.04568		mg/L		91	71 - 125	7	25
Toluene	0.0500	0.04486		mg/L		90	70 - 130	12	25

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-108371/12

Matrix: Water

Analysis Batch: 108371

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	0.04525		mg/L		91	75 - 125	11	25
trans-1,3-Dichloropropene	0.0500	0.04746		mg/L		95	66 - 125	8	25
1,2,3-Trichlorobenzene	0.0500	0.05243		mg/L		105	75 - 137	1	25
1,2,4-Trichlorobenzene	0.0500	0.05133		mg/L		103	75 - 135	2	25
1,1,1-Trichloroethane	0.0500	0.04597		mg/L		92	70 - 130	10	25
1,1,2-Trichloroethane	0.0500	0.04598		mg/L		92	70 - 130	10	25
Trichloroethene	0.0500	0.04693		mg/L		94	75 - 135	9	25
Trichlorofluoromethane	0.0500	0.04613		mg/L		92	60 - 140	10	25
1,2,3-Trichloropropane	0.0500	0.04918		mg/L		98	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.04699		mg/L		94	75 - 125	9	25
1,3,5-Trimethylbenzene	0.0500	0.04646		mg/L		93	60 - 140	10	25
Vinyl chloride	0.0500	0.04641		mg/L		93	60 - 140	8	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 880-29607-1 MS

Matrix: Water

Analysis Batch: 108371

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
Benzene	<0.000460	U	0.0500	0.04637		mg/L		93	66 - 142
Bromobenzene	<0.000665	U	0.0500	0.04801		mg/L		96	75 - 125
Bromochloromethane	<0.000657	U	0.0500	0.04593		mg/L		92	60 - 140
Bromodichloromethane	<0.000552	U	0.0500	0.04667		mg/L		93	75 - 125
Bromoform	<0.000633	U	0.0500	0.05004		mg/L		100	75 - 125
Bromomethane	<0.00142	U	0.0500	0.04293		mg/L		86	60 - 140
2-Butanone	<0.00828	U	0.250	0.2221		mg/L		89	60 - 140
Carbon tetrachloride	<0.000896	U	0.0500	0.04752		mg/L		95	62 - 125
Chlorobenzene	<0.000530	U	0.0500	0.04669		mg/L		93	60 - 133
Chloroethane	<0.00198	U	0.0500	0.04939		mg/L		99	60 - 140
Chloroform	<0.000643	U	0.0500	0.04629		mg/L		93	70 - 130
Chloromethane	<0.00204	U	0.0500	0.04612		mg/L		92	60 - 140
2-Chlorotoluene	<0.00118	U	0.0500	0.04573		mg/L		91	73 - 125
4-Chlorotoluene	<0.000472	U	0.0500	0.04757		mg/L		95	74 - 125
cis-1,2-Dichloroethene	<0.000714	U	0.0500	0.04583		mg/L		92	75 - 125
cis-1,3-Dichloropropene	<0.00107	U	0.0500	0.04687		mg/L		94	74 - 125
Dibromochloromethane	<0.000547	U	0.0500	0.04740		mg/L		95	73 - 125
1,2-Dibromo-3-Chloropropane	<0.00127	U F1	0.0500	0.09383	F1	mg/L		188	59 - 125
1,2-Dibromoethane	<0.000999	U	0.0500	0.04703		mg/L		94	73 - 125
1,2-Dichlorobenzene	<0.000509	U F1	0.0500	0.03199	F1	mg/L		64	75 - 125
1,3-Dichlorobenzene	<0.000513	U	0.0500	0.04752		mg/L		95	75 - 125
1,4-Dichlorobenzene	<0.000513	U	0.0500	0.04662		mg/L		93	75 - 125
Dichlorodifluoromethane	<0.000919	U	0.0500	0.04871		mg/L		97	70 - 130
1,1-Dichloroethane	<0.000635	U	0.0500	0.04680		mg/L		94	72 - 125

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: 880-29607-1 MS

Client Sample ID: MW-1

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 108371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	<0.000590	U	0.0500	0.04570		mg/L		91	68 - 127
1,1-Dichloroethene	<0.000738	U	0.0500	0.04653		mg/L		93	59 - 172
1,2-Dichloropropane	<0.000667	U	0.0500	0.04546		mg/L		91	74 - 125
1,3-Dichloropropane	<0.000514	U	0.0500	0.04649		mg/L		93	75 - 125
2,2-Dichloropropane	<0.000780	U	0.0500	0.04430		mg/L		89	75 - 125
1,1-Dichloropropene	<0.00160	U	0.0500	0.04646		mg/L		93	75 - 125
Ethylbenzene	<0.000411	U	0.0500	0.04773		mg/L		95	75 - 125
Hexachlorobutadiene	<0.00126	U	0.0500	0.04922		mg/L		98	75 - 125
Isopropylbenzene	<0.000613	U	0.0500	0.05464		mg/L		109	75 - 125
Methylene Chloride	<0.00173	U	0.0500	0.04634		mg/L		93	75 - 125
m,p-Xylenes	<0.00124	U	0.0500	0.04729		mg/L		95	75 - 125
MTBE	<0.00139	U	0.0500	0.04589		mg/L		92	65 - 135
Naphthalene	<0.00135	U	0.0500	0.05470		mg/L		109	70 - 130
n-Butylbenzene	<0.000644	U	0.0500	0.03898		mg/L		78	75 - 125
sec-Propylbenzene	<0.000498	U	0.0500	0.04825		mg/L		97	75 - 125
o-Xylene	<0.000551	U	0.0500	0.04724		mg/L		94	75 - 125
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.0500	0.04854		mg/L		97	75 - 125
sec-Butylbenzene	<0.000468	U	0.0500	0.04766		mg/L		95	75 - 125
Styrene	<0.000655	U	0.0500	0.04851		mg/L		97	75 - 125
tert-Butylbenzene	<0.000442	U	0.0500	0.04732		mg/L		95	75 - 125
1,1,1,2-Tetrachloroethane	<0.000644	U	0.0500	0.04865		mg/L		97	72 - 125
1,1,2,2-Tetrachloroethane	<0.000470	U	0.0500	0.04753		mg/L		95	74 - 125
Tetrachloroethene	<0.000801	U	0.0500	0.04749		mg/L		95	71 - 125
Toluene	<0.000475	U	0.0500	0.04653		mg/L		93	59 - 139
trans-1,2-Dichloroethene	<0.000945	U	0.0500	0.04599		mg/L		92	75 - 125
trans-1,3-Dichloropropene	<0.00127	U	0.0500	0.04786		mg/L		96	66 - 125
1,2,3-Trichlorobenzene	<0.00217	U	0.0500	0.05290		mg/L		106	75 - 137
1,2,4-Trichlorobenzene	<0.00175	U	0.0500	0.05086		mg/L		102	75 - 135
1,1,1-Trichloroethane	<0.00169	U	0.0500	0.04720		mg/L		94	75 - 125
1,1,2-Trichloroethane	<0.000511	U	0.0500	0.04573		mg/L		91	75 - 127
Trichloroethene	<0.000791	U	0.0500	0.04839		mg/L		97	62 - 137
Trichlorofluoromethane	<0.000638	U	0.0500	0.04928		mg/L		99	60 - 140
1,2,3-Trichloropropane	<0.000490	U	0.0500	0.04990		mg/L		100	75 - 125
1,2,4-Trimethylbenzene	<0.000417	U	0.0500	0.04742		mg/L		95	75 - 125
1,3,5-Trimethylbenzene	<0.000456	U	0.0500	0.04710		mg/L		94	70 - 125
Vinyl chloride	<0.000638	U	0.0500	0.04788		mg/L		96	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	99		80 - 120

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109176/1-A

Matrix: Water

Analysis Batch: 109562

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109176

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		06/22/23 16:24	06/26/23 15:02	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		06/22/23 16:24	06/26/23 15:02	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		06/22/23 16:24	06/26/23 15:02	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 135			06/22/23 16:24	06/26/23 15:02	1
o-Terphenyl	114		70 - 135			06/22/23 16:24	06/26/23 15:02	1

Lab Sample ID: LCS 860-109176/2-A

Matrix: Water

Analysis Batch: 109078

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109176

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.7	127.0		mg/L		127	70 - 135
Diesel Range Organics (Over C10-C28)	100	99.26		mg/L		99	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	98		70 - 135				
o-Terphenyl	108		70 - 135				

Lab Sample ID: LCSD 860-109176/3-A

Matrix: Water

Analysis Batch: 109078

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109176

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.7	131.6		mg/L		132	70 - 135	4	35
Diesel Range Organics (Over C10-C28)	100	104.7		mg/L		105	70 - 135	5	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 135						
o-Terphenyl	101		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-108212/3

Matrix: Water

Analysis Batch: 108212

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.250	U	0.500	0.250 mg/L			06/16/23 15:04	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/16/23 15:04	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/16/23 15:04	1

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-108212/4

Matrix: Water

Analysis Batch: 108212

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	9.688		mg/L		97	90 - 110
Fluoride	10.0	10.06		mg/L		101	90 - 110
Sulfate	10.0	9.737		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-108212/5

Matrix: Water

Analysis Batch: 108212

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	9.702		mg/L		97	90 - 110	0	20
Fluoride	10.0	10.18		mg/L		102	90 - 110	1	20
Sulfate	10.0	9.753		mg/L		98	90 - 110	0	20

Lab Sample ID: LLCS 860-108212/7

Matrix: Water

Analysis Batch: 108212

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	0.4737	J	mg/L		95	50 - 150
Fluoride	0.500	0.4143	J	mg/L		83	50 - 150
Sulfate	0.500	0.4778	J	mg/L		96	50 - 150

Lab Sample ID: MB 860-108213/3

Matrix: Water

Analysis Batch: 108213

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			06/16/23 15:04	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			06/16/23 15:04	1

Lab Sample ID: LCS 860-108213/4

Matrix: Water

Analysis Batch: 108213

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	9.805		mg/L		98	80 - 120
Nitrite as N	10.0	9.922		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-108213/5

Matrix: Water

Analysis Batch: 108213

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	9.814		mg/L		98	80 - 120	0	20
Nitrite as N	10.0	9.939		mg/L		99	80 - 120	0	20

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LLCS 860-108213/6

Matrix: Water

Analysis Batch: 108213

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	0.09830	J	mg/L		98	50 - 150
Nitrite as N	0.100	0.09947	J	mg/L		99	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-108543/3

Matrix: Water

Analysis Batch: 108543

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			06/19/23 11:39	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/19/23 11:39	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/19/23 11:39	1

Lab Sample ID: LCS 860-108543/4

Matrix: Water

Analysis Batch: 108543

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 860-108543/5

Matrix: Water

Analysis Batch: 108543

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	253.7		mg/L		101	85 - 115	1	20

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-29607-1 DU

Matrix: Water

Analysis Batch: 108534

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.9	HF	7.0		SU		0.4	20
Temperature	20.2	HF	20.3		Degrees C		0.5	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-108506/13

Matrix: Water

Analysis Batch: 108506

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<9.89	U	100	mg/L			06/19/23 14:24	20

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QC Sample Results

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-108506/14

Matrix: Water

Analysis Batch: 108506

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	43.00		mg/L		86	80 - 120

Lab Sample ID: LCSD 860-108506/15

Matrix: Water

Analysis Batch: 108506

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	43.00		mg/L		86	80 - 120	0	20

Lab Sample ID: 880-29607-2 MS

Matrix: Water

Analysis Batch: 108506

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	<0.495	U	50.0	41.00		mg/L		80	80 - 120

Lab Sample ID: 880-29607-2 MSD

Matrix: Water

Analysis Batch: 108506

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	<0.495	U	50.0	41.00		mg/L		82	80 - 120	0	20

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QC Association Summary

Client: Ensolum

Job ID: 880-29607-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 108371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	8260C	
880-29607-2	MW-2	Total/NA	Water	8260C	
MB 860-108371/17	Method Blank	Total/NA	Water	8260C	
LCS 860-108371/1011	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-108371/12	Lab Control Sample Dup	Total/NA	Water	8260C	
880-29607-1 MS	MW-1	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 101425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	8015 NM	
880-29607-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 109078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-109176/2-A	Lab Control Sample	Total/NA	Water	8015B NM	109176
LCSD 860-109176/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	109176

Prep Batch: 109176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-29607-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-109176/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-109176/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-109176/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 109318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	8015B NM	109176
880-29607-2	MW-2	Total/NA	Water	8015B NM	109176

Analysis Batch: 109562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-109176/1-A	Method Blank	Total/NA	Water	8015B NM	109176

HPLC/IC

Analysis Batch: 108212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	300.0	
880-29607-2	MW-2	Total/NA	Water	300.0	
MB 860-108212/3	Method Blank	Total/NA	Water	300.0	
LCS 860-108212/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-108212/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-108212/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 108213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	300.0	
880-29607-2	MW-2	Total/NA	Water	300.0	
MB 860-108213/3	Method Blank	Total/NA	Water	300.0	

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QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-29607-1

HPLC/IC (Continued)

Analysis Batch: 108213 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-108213/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-108213/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-108213/6	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 108506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-29607-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-108506/13	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-108506/14	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-108506/15	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-29607-2 MS	MW-2	Total/NA	Water	SM 4500 S2 F	
880-29607-2 MSD	MW-2	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 108534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-29607-2	MW-2	Total/NA	Water	SM 4500 H+ B	
880-29607-1 DU	MW-1	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 108543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	SM 2320B	
880-29607-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-108543/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-108543/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-108543/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 108911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29607-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-29607-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Lab Chronicle

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-29607-1

Client Sample ID: MW-1

Date Collected: 06/15/23 11:10

Date Received: 06/15/23 15:22

Lab Sample ID: 880-29607-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	108371	NA	EET HOU	06/18/23 19:43
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/19/23 18:11
Total/NA	Prep	8015NM Aq Prep			109176	SAR	EET HOU	06/22/23 16:24
Total/NA	Analysis	8015B NM		1	109318	T1S	EET HOU	06/23/23 16:21
Total/NA	Analysis	300.0		1	108212	A1S	EET HOU	06/16/23 18:53
Total/NA	Analysis	300.0		1	108213	A1S	EET HOU	06/16/23 18:53
Total/NA	Analysis	SM 2320B		1	108543	TL	EET HOU	06/19/23 15:25
Total/NA	Analysis	SM 4500 CO2 D		1	108911	SC	EET HOU	06/21/23 11:57
Total/NA	Analysis	SM 4500 H+ B		1	108534	TL	EET HOU	06/19/23 15:55
Total/NA	Analysis	SM 4500 S2 F		1	108506	SCI	EET HOU	06/19/23 14:24

Client Sample ID: MW-2

Date Collected: 06/15/23 12:05

Date Received: 06/15/23 15:22

Lab Sample ID: 880-29607-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	108371	NA	EET HOU	06/18/23 20:03
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/19/23 18:11
Total/NA	Prep	8015NM Aq Prep			109176	SAR	EET HOU	06/22/23 16:24
Total/NA	Analysis	8015B NM		1	109318	T1S	EET HOU	06/23/23 16:42
Total/NA	Analysis	300.0		1	108212	A1S	EET HOU	06/17/23 00:57
Total/NA	Analysis	300.0		1	108213	A1S	EET HOU	06/17/23 00:57
Total/NA	Analysis	SM 2320B		1	108543	TL	EET HOU	06/19/23 15:42
Total/NA	Analysis	SM 4500 CO2 D		1	108911	SC	EET HOU	06/21/23 11:57
Total/NA	Analysis	SM 4500 H+ B		1	108534	TL	EET HOU	06/19/23 15:58
Total/NA	Analysis	SM 4500 S2 F		1	108506	SCI	EET HOU	06/19/23 14:24

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: 880-29607-1

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	T104704215-23-50	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: 880-29607-1

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	EPA	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:

EPA = US Environmental Protection Agency

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: 880-29607-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-29607-1	MW-1	Water	06/15/23 11:10	06/15/23 15:22
880-29607-2	MW-2	Water	06/15/23 12:05	06/15/23 15:22

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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)565-3443 Lubbock, TX (806)794-1296
Phoenix, AZ (480-355-0900) Atlanta GA (770-448-8800) Tampa FL (813)
Hobbs NM (575-392-7550)

Chain of Custody

Work Order No: 29607

www.xenco.com Page 1 of 1

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

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ eval 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								
			500 CO2 c							
			6.2							
			00							

SAMPLE RECEIPT			
Temp Blank:	Yes	No	Wet Ice:
Yes	No	Yes	No
Temperature (°C):	10.9/10.2 Thermometer ID		
Received Intact:	Yes No		
Cooler Custody Seals	Yes No N/A Correction Factor:		
Sample Custody Seals	Yes No N/A Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	Dissolve	Dissolve	VOC SW	TPH EPA	Chloride	pH EPA
MMW-1	GW	6-15-23	1110	-	7	X	X	X	X	X	X
MMW-2	GW	6-15-23	1205	-	7	X	X	X	X	X	X
											



880-29607 Chain of Custody

Sample Comments

24 Hr



880-29607 Chain of Custody

Total 200.7 / 6010 200.8 / 6020:

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

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn I J V Zn

TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 Hg

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 		10/15/23	2		
3		1522	4		
5			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29607-1

Login Number: 29607

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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	Received same day of collection; chilling process has begun.
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: 880-29607-1

Login Number: 29607

List Number: 2

Creator: Babar, Syed

List Source: Eurofins Houston

List Creation: 06/16/23 04:43 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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/30/2023 2:19:14 PM

JOB DESCRIPTION

South Hobbs - 03B1417002
South Hobbs

JOB NUMBER

880-29967-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/30/2023 2:19:14 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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

Laboratory Job ID: 880-29967-1

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Definitions/Glossary

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

Job ID: 880-29967-1

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.
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: 880-29967-1

Job ID: 880-29967-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-29967-1

Receipt

The samples were received on 6/23/2023 2:54 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 1.0°C

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) associated with batch 860-109461 recovered above the upper control limit for 1,2,4-Trichlorobenzene .The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 860-109461/2).

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-109419 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recovery is 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.

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Client Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29967-1

Date Collected: 06/23/23 10:20

Matrix: Water

Date Received: 06/23/23 14:54

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/26/23 12:39	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/26/23 12:39	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/26/23 12:39	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/26/23 12:39	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/26/23 12:39	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/26/23 12:39	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/26/23 12:39	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/26/23 12:39	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/26/23 12:39	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/26/23 12:39	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/26/23 12:39	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/26/23 12:39	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/26/23 12:39	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/26/23 12:39	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/26/23 12:39	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/26/23 12:39	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/26/23 12:39	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 12:39	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/26/23 12:39	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/26/23 12:39	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 12:39	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 12:39	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 12:39	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/26/23 12:39	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/26/23 12:39	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/26/23 12:39	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/26/23 12:39	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/26/23 12:39	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/26/23 12:39	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/26/23 12:39	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/26/23 12:39	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/26/23 12:39	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/26/23 12:39	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/26/23 12:39	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 12:39	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/26/23 12:39	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/26/23 12:39	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 12:39	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/26/23 12:39	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/26/23 12:39	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 12:39	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/26/23 12:39	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/26/23 12:39	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/26/23 12:39	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 12:39	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/26/23 12:39	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/26/23 12:39	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/26/23 12:39	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/26/23 12:39	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29967-1

Date Collected: 06/23/23 10:20

Matrix: Water

Date Received: 06/23/23 14:54

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 12:39	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/26/23 12:39	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/26/23 12:39	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/26/23 12:39	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/26/23 12:39	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/26/23 12:39	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/26/23 12:39	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/26/23 12:39	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/26/23 12:39	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/26/23 12:39	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/26/23 12:39	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 12:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		06/26/23 12:39	1
4-Bromofluorobenzene (Surr)	101		74 - 124		06/26/23 12:39	1
Dibromofluoromethane (Surr)	113		75 - 131		06/26/23 12:39	1
Dibromofluoromethane (Surr)	113		75 - 131		06/26/23 12:39	1
1,2-Dichloroethane-d4 (Surr)	109		63 - 144		06/26/23 12:39	1
1,2-Dichloroethane-d4 (Surr)	109		63 - 144		06/26/23 12:39	1
Toluene-d8 (Surr)	107		80 - 120		06/26/23 12:39	1
Toluene-d8 (Surr)	107		80 - 120		06/26/23 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.991	U	5.02	0.991 mg/L			06/26/23 13:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.991	U	5.02	0.991 mg/L		06/27/23 14:20	06/28/23 03:55	1
Diesel Range Organics (Over C10-C28)	<0.991	U	5.02	0.991 mg/L		06/27/23 14:20	06/28/23 03:55	1
Oil Range Organics (Over C28-C36)	<0.957	U	5.02	0.957 mg/L		06/27/23 14:20	06/28/23 03:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 135	06/27/23 14:20	06/28/23 03:55	1
o-Terphenyl	124		70 - 135	06/27/23 14:20	06/28/23 03:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.2		0.500	0.250 mg/L			06/24/23 17:48	1
Nitrate as N	0.0975	J	0.100	0.0391 mg/L			06/24/23 17:48	1
Fluoride	0.469	J	0.500	0.100 mg/L			06/24/23 17:48	1
Nitrite as N	0.178		0.100	0.0293 mg/L			06/24/23 17:48	1
Sulfate	34.8		0.500	0.200 mg/L			06/24/23 17:48	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	754		4.00	4.00 mg/L			06/26/23 14:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	754		4.00	4.00 mg/L			06/26/23 14:07	1

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Client Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-29967-1

Date Collected: 06/23/23 10:20

Matrix: Water

Date Received: 06/23/23 14:54

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO ₃ (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/26/23 14:07	1
Carbon dioxide (SM 4500 CO ₂ D)	738			mg/L			06/30/23 15:04	1
Carbon Dioxide, Free (SM 4500 CO ₂ D)	75.4			mg/L			06/30/23 15:04	1
pH (SM 4500 H+ B)	7.3	HF		SU			06/26/23 19:08	1
Temperature (SM 4500 H+ B)	20.2	HF		Degrees C			06/26/23 19:08	1
Sulfide (SM 4500 S ₂ F)	<0.495	U	5.00	0.495 mg/L			06/27/23 15:56	1

Client Sample ID: MW-2

Lab Sample ID: 880-29967-2

Date Collected: 06/23/23 11:15

Matrix: Water

Date Received: 06/23/23 14:54

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0172		0.00100	0.000460 mg/L			06/26/23 13:17	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/26/23 13:17	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/26/23 13:17	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/26/23 13:17	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/26/23 13:17	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/26/23 13:17	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/26/23 13:17	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/26/23 13:17	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/26/23 13:17	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/26/23 13:17	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/26/23 13:17	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/26/23 13:17	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/26/23 13:17	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/26/23 13:17	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/26/23 13:17	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/26/23 13:17	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/26/23 13:17	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 13:17	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/26/23 13:17	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/26/23 13:17	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 13:17	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 13:17	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 13:17	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/26/23 13:17	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/26/23 13:17	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/26/23 13:17	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/26/23 13:17	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/26/23 13:17	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/26/23 13:17	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/26/23 13:17	1
Ethylbenzene	0.0266		0.00100	0.000411 mg/L			06/26/23 13:17	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/26/23 13:17	1
Isopropylbenzene	0.0110		0.00100	0.000613 mg/L			06/26/23 13:17	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/26/23 13:17	1
m,p-Xylenes	0.0738		0.0100	0.00124 mg/L			06/26/23 13:17	1

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Client Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-29967-2

Date Collected: 06/23/23 11:15

Matrix: Water

Date Received: 06/23/23 14:54

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/26/23 13:17	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/26/23 13:17	1
n-Butylbenzene	0.00100		0.00100	0.000644 mg/L			06/26/23 13:17	1
N-Propylbenzene	0.00325		0.00100	0.000498 mg/L			06/26/23 13:17	1
o-Xylene	0.0191		0.00100	0.000551 mg/L			06/26/23 13:17	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 13:17	1
sec-Butylbenzene	0.00117		0.00100	0.000468 mg/L			06/26/23 13:17	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/26/23 13:17	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/26/23 13:17	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 13:17	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/26/23 13:17	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/26/23 13:17	1
Toluene	0.00375		0.00100	0.000475 mg/L			06/26/23 13:17	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/26/23 13:17	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 13:17	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/26/23 13:17	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/26/23 13:17	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/26/23 13:17	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/26/23 13:17	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/26/23 13:17	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/26/23 13:17	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/26/23 13:17	1
1,2,4-Trimethylbenzene	0.0320		0.00100	0.000417 mg/L			06/26/23 13:17	1
1,3,5-Trimethylbenzene	0.00823		0.00100	0.000456 mg/L			06/26/23 13:17	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/26/23 13:17	1
Xylenes, Total	0.0929		0.0100	0.00124 mg/L			06/26/23 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		74 - 124		06/26/23 13:17	1
Dibromofluoromethane (Surr)	116		75 - 131		06/26/23 13:17	1
1,2-Dichloroethane-d4 (Surr)	116		63 - 144		06/26/23 13:17	1
Toluene-d8 (Surr)	109		80 - 120		06/26/23 13:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.47	J	4.73	0.935 mg/L			06/26/23 13:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.47	J	4.73	0.935 mg/L		06/27/23 14:20	06/28/23 04:14	1
Diesel Range Organics (Over C10-C28)	<0.935	U	4.73	0.935 mg/L		06/27/23 14:20	06/28/23 04:14	1
Oil Range Organics (Over C28-C36)	<0.902	U	4.73	0.902 mg/L		06/27/23 14:20	06/28/23 04:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 135	06/27/23 14:20	06/28/23 04:14	1
o-Terphenyl	110		70 - 135	06/27/23 14:20	06/28/23 04:14	1

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Client Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-29967-2

Date Collected: 06/23/23 11:15

Matrix: Water

Date Received: 06/23/23 14:54

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.1		0.500	0.250	mg/L			06/24/23 18:06	1
Nitrate as N	0.110		0.100	0.0391	mg/L			06/24/23 18:06	1
Fluoride	0.463	J	0.500	0.100	mg/L			06/24/23 18:06	1
Nitrite as N	0.318		0.100	0.0293	mg/L			06/24/23 18:06	1
Sulfate	38.7		0.500	0.200	mg/L			06/24/23 18:06	1
General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	788		4.00	4.00	mg/L			06/26/23 14:19	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	788		4.00	4.00	mg/L			06/26/23 14:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			06/26/23 14:19	1
Carbon dioxide (SM 4500 CO2 D)	755				mg/L			06/30/23 15:04	1
Carbon Dioxide, Free (SM 4500 CO2 D)	62.6				mg/L			06/30/23 15:04	1
pH (SM 4500 H+ B)	7.4	HF			SU			06/26/23 19:11	1
Temperature (SM 4500 H+ B)	21.0	HF			Degrees C			06/26/23 19:11	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495	mg/L			06/27/23 15:56	1

Surrogate Summary

Client: Ensolum

Job ID: 880-29967-1

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)	BFB (74-124)	DBFM (75-131)	DBFM (75-131)	DCA (63-144)	DCA (63-144)	TOL (80-120)	TOL (80-120)
880-29967-1	MW-1	101	101	113	113	109	109	107	107
880-29967-1 MS	MW-1	92	92	92	92	101	101	98	98
880-29967-2	MW-2	91	91	116	116	116	116	109	109
LCS 860-109461/3	Lab Control Sample	91	91	93	93	100	100	98	98
LCS 860-109462/3	Lab Control Sample	91	91	93	93	100	100	98	98
LCSD 860-109461/4	Lab Control Sample Dup	93	93	92	92	99	99	97	97
LCSD 860-109462/4	Lab Control Sample Dup	93	93	92	92	99	99	97	97
MB 860-109461/9	Method Blank	96	96	99	99	108	108	100	100
MB 860-109462/9	Method Blank	96	96	99	99	108	108	100	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

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

TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-135)	OTPH1 (70-135)
880-29967-1	MW-1	114	124
880-29967-2	MW-2	98	110
LCS 860-109819/2-A	Lab Control Sample	102	82
LCSD 860-109819/3-A	Lab Control Sample Dup	100	81
MB 860-109819/1-A	Method Blank	114	123

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109461/9

Matrix: Water

Analysis Batch: 109461

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/26/23 11:42	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/26/23 11:42	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/26/23 11:42	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/26/23 11:42	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/26/23 11:42	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/26/23 11:42	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/26/23 11:42	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/26/23 11:42	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/26/23 11:42	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/26/23 11:42	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/26/23 11:42	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/26/23 11:42	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/26/23 11:42	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/26/23 11:42	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/26/23 11:42	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/26/23 11:42	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/26/23 11:42	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 11:42	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/26/23 11:42	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/26/23 11:42	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 11:42	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 11:42	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 11:42	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/26/23 11:42	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/26/23 11:42	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/26/23 11:42	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/26/23 11:42	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/26/23 11:42	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/26/23 11:42	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/26/23 11:42	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/26/23 11:42	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/26/23 11:42	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/26/23 11:42	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/26/23 11:42	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 11:42	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/26/23 11:42	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/26/23 11:42	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 11:42	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/26/23 11:42	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/26/23 11:42	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 11:42	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/26/23 11:42	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/26/23 11:42	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/26/23 11:42	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 11:42	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/26/23 11:42	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/26/23 11:42	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/26/23 11:42	1

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109461/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 109461

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			06/26/23 11:42	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 11:42	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/26/23 11:42	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/26/23 11:42	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/26/23 11:42	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/26/23 11:42	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/26/23 11:42	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/26/23 11:42	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/26/23 11:42	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/26/23 11:42	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/26/23 11:42	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/26/23 11:42	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 11:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		74 - 124		06/26/23 11:42	1
Dibromofluoromethane (Surr)	99		75 - 131		06/26/23 11:42	1
1,2-Dichloroethane-d4 (Surr)	108		63 - 144		06/26/23 11:42	1
Toluene-d8 (Surr)	100		80 - 120		06/26/23 11:42	1

Lab Sample ID: LCS 860-109461/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 109461

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05263		mg/L		105	75 - 125
Bromobenzene	0.0500	0.05196		mg/L		104	75 - 125
Bromochloromethane	0.0500	0.05428		mg/L		109	60 - 140
Bromodichloromethane	0.0500	0.05499		mg/L		110	75 - 125
Bromoform	0.0500	0.05453		mg/L		109	70 - 130
Bromomethane	0.0500	0.05901		mg/L		118	60 - 140
2-Butanone	0.250	0.2131		mg/L		85	60 - 140
Carbon tetrachloride	0.0500	0.04885		mg/L		98	70 - 130
Chlorobenzene	0.0500	0.05331		mg/L		107	65 - 135
Chloroethane	0.0500	0.06380		mg/L		128	60 - 140
Chloroform	0.0500	0.04883		mg/L		98	70 - 121
Chloromethane	0.0500	0.04648		mg/L		93	60 - 140
2-Chlorotoluene	0.0500	0.05074		mg/L		101	73 - 125
4-Chlorotoluene	0.0500	0.05078		mg/L		102	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04903		mg/L		98	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05340		mg/L		107	74 - 125
Dibromochloromethane	0.0500	0.05847		mg/L		117	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05222		mg/L		104	59 - 125
1,2-Dibromoethane	0.0500	0.05314		mg/L		106	73 - 125
1,2-Dichlorobenzene	0.0500	0.05325		mg/L		107	75 - 125
1,3-Dichlorobenzene	0.0500	0.05344		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05380		mg/L		108	75 - 125
Dichlorodifluoromethane	0.0500	0.05617		mg/L		112	50 - 150

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-109461/3

Matrix: Water

Analysis Batch: 109461

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	0.04696		mg/L		94	70 - 130
1,2-Dichloroethane	0.0500	0.05735		mg/L		115	72 - 130
1,1-Dichloroethene	0.0500	0.05146		mg/L		103	50 - 150
1,2-Dichloropropane	0.0500	0.04742		mg/L		95	74 - 125
1,3-Dichloropropane	0.0500	0.05240		mg/L		105	75 - 125
2,2-Dichloropropane	0.0500	0.05383		mg/L		108	75 - 125
1,1-Dichloropropene	0.0500	0.04957		mg/L		99	75 - 125
Ethylbenzene	0.0500	0.05285		mg/L		106	75 - 125
Hexachlorobutadiene	0.0500	0.05758		mg/L		115	75 - 125
Isopropylbenzene	0.0500	0.05547		mg/L		111	75 - 125
Methylene Chloride	0.0500	0.04557		mg/L		91	71 - 125
m,p-Xylenes	0.0500	0.05419		mg/L		108	75 - 125
MTBE	0.0500	0.05118		mg/L		102	65 - 135
Naphthalene	0.0500	0.05359		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05142		mg/L		103	75 - 125
N-Propylbenzene	0.0500	0.05039		mg/L		101	75 - 125
o-Xylene	0.0500	0.05425		mg/L		108	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05446		mg/L		109	75 - 125
sec-Butylbenzene	0.0500	0.05265		mg/L		105	75 - 125
Styrene	0.0500	0.05694		mg/L		114	75 - 125
tert-Butylbenzene	0.0500	0.05309		mg/L		106	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05554		mg/L		111	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04401		mg/L		88	74 - 125
Tetrachloroethene	0.0500	0.05639		mg/L		113	71 - 125
Toluene	0.0500	0.04846		mg/L		97	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04916		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05634		mg/L		113	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05635		mg/L		113	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05981		mg/L		120	75 - 135
1,1,1-Trichloroethane	0.0500	0.05389		mg/L		108	70 - 130
1,1,2-Trichloroethane	0.0500	0.05085		mg/L		102	70 - 130
Trichloroethene	0.0500	0.05423		mg/L		108	75 - 135
Trichlorofluoromethane	0.0500	0.06139		mg/L		123	60 - 140
1,2,3-Trichloropropane	0.0500	0.04529		mg/L		91	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05225		mg/L		105	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05184		mg/L		104	60 - 140
Vinyl chloride	0.0500	0.05584		mg/L		112	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		74 - 124
Dibromofluoromethane (Surr)	93		75 - 131
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
Toluene-d8 (Surr)	98		80 - 120

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-109461/4

Matrix: Water

Analysis Batch: 109461

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	0.05139		mg/L		103	75 - 125	2	25
Bromobenzene	0.0500	0.05483		mg/L		110	75 - 125	5	25
Bromochloromethane	0.0500	0.05570		mg/L		111	60 - 140	3	25
Bromodichloromethane	0.0500	0.05601		mg/L		112	75 - 125	2	25
Bromoform	0.0500	0.05471		mg/L		109	70 - 130	0	25
Bromomethane	0.0500	0.06795		mg/L		136	60 - 140	14	25
2-Butanone	0.250	0.2180		mg/L		87	60 - 140	2	25
Carbon tetrachloride	0.0500	0.04666		mg/L		93	70 - 130	5	25
Chlorobenzene	0.0500	0.05448		mg/L		109	65 - 135	2	25
Chloroethane	0.0500	0.06712		mg/L		134	60 - 140	5	25
Chloroform	0.0500	0.04914		mg/L		98	70 - 121	1	25
Chloromethane	0.0500	0.05315		mg/L		106	60 - 140	13	25
2-Chlorotoluene	0.0500	0.05236		mg/L		105	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05257		mg/L		105	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.05005		mg/L		100	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05544		mg/L		111	74 - 125	4	25
Dibromochloromethane	0.0500	0.05950		mg/L		119	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05377		mg/L		108	59 - 125	3	25
1,2-Dibromoethane	0.0500	0.05406		mg/L		108	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05637		mg/L		113	75 - 125	6	25
1,3-Dichlorobenzene	0.0500	0.05552		mg/L		111	75 - 125	4	25
1,4-Dichlorobenzene	0.0500	0.05599		mg/L		112	75 - 125	4	25
Dichlorodifluoromethane	0.0500	0.05837		mg/L		117	50 - 150	4	25
1,1-Dichloroethane	0.0500	0.04946		mg/L		99	70 - 130	5	25
1,2-Dichloroethane	0.0500	0.05681		mg/L		114	72 - 130	1	25
1,1-Dichloroethene	0.0500	0.05164		mg/L		103	50 - 150	0	25
1,2-Dichloropropane	0.0500	0.04901		mg/L		98	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.05271		mg/L		105	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.05579		mg/L		112	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.04919		mg/L		98	75 - 125	1	25
Ethylbenzene	0.0500	0.05376		mg/L		108	75 - 125	2	25
Hexachlorobutadiene	0.0500	0.05937		mg/L		119	75 - 125	3	25
Isopropylbenzene	0.0500	0.05719		mg/L		114	75 - 125	3	25
Methylene Chloride	0.0500	0.04668		mg/L		93	71 - 125	2	25
m,p-Xylenes	0.0500	0.05451		mg/L		109	75 - 125	1	25
MTBE	0.0500	0.05391		mg/L		108	65 - 135	5	25
Naphthalene	0.0500	0.05845		mg/L		117	70 - 130	9	25
n-Butylbenzene	0.0500	0.05381		mg/L		108	75 - 125	5	25
N-Propylbenzene	0.0500	0.05250		mg/L		105	75 - 125	4	25
o-Xylene	0.0500	0.05502		mg/L		110	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05702		mg/L		114	75 - 125	5	25
sec-Butylbenzene	0.0500	0.05504		mg/L		110	75 - 125	4	25
Styrene	0.0500	0.05700		mg/L		114	75 - 125	0	25
tert-Butylbenzene	0.0500	0.05536		mg/L		111	75 - 125	4	25
1,1,1,2-Tetrachloroethane	0.0500	0.05685		mg/L		114	72 - 125	2	25
1,1,1,2,2-Tetrachloroethane	0.0500	0.04554		mg/L		91	74 - 125	3	25
Tetrachloroethene	0.0500	0.05789		mg/L		116	71 - 125	3	25
Toluene	0.0500	0.04937		mg/L		99	70 - 130	2	25

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-109461/4

Matrix: Water

Analysis Batch: 109461

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	0.04887		mg/L		98	75 - 125	1	25
trans-1,3-Dichloropropene	0.0500	0.05723		mg/L		114	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.06156		mg/L		123	75 - 137	9	25
1,2,4-Trichlorobenzene	0.0500	0.06442		mg/L		129	75 - 135	7	25
1,1,1-Trichloroethane	0.0500	0.05494		mg/L		110	70 - 130	2	25
1,1,2-Trichloroethane	0.0500	0.05240		mg/L		105	70 - 130	3	25
Trichloroethene	0.0500	0.05504		mg/L		110	75 - 135	1	25
Trichlorofluoromethane	0.0500	0.06427		mg/L		129	60 - 140	5	25
1,2,3-Trichloropropane	0.0500	0.04858		mg/L		97	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.05540		mg/L		111	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.05472		mg/L		109	60 - 140	5	25
Vinyl chloride	0.0500	0.05931		mg/L		119	60 - 140	6	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	93		74 - 124
Dibromofluoromethane (Surr)	92		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 880-29967-1 MS

Matrix: Water

Analysis Batch: 109461

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
Benzene	<0.000460	U	0.0500	0.04839		mg/L		97	66 - 142
Bromobenzene	<0.000665	U	0.0500	0.04933		mg/L		99	75 - 125
Bromochloromethane	<0.000657	U	0.0500	0.04999		mg/L		100	60 - 140
Bromodichloromethane	<0.000552	U	0.0500	0.05324		mg/L		106	75 - 125
Bromoform	<0.000633	U	0.0500	0.04969		mg/L		99	75 - 125
Bromomethane	<0.00142	U	0.0500	0.05493		mg/L		110	60 - 140
2-Butanone	<0.00828	U	0.250	0.1860		mg/L		74	60 - 140
Carbon tetrachloride	<0.000896	U	0.0500	0.04654		mg/L		93	62 - 125
Chlorobenzene	<0.000530	U	0.0500	0.05083		mg/L		102	60 - 133
Chloroethane	<0.00198	U	0.0500	0.05635		mg/L		113	60 - 140
Chloroform	<0.000643	U	0.0500	0.04497		mg/L		90	70 - 130
Chloromethane	<0.00204	U	0.0500	0.04482		mg/L		90	60 - 140
2-Chlorotoluene	<0.00118	U	0.0500	0.04795		mg/L		96	73 - 125
4-Chlorotoluene	<0.000472	U	0.0500	0.04830		mg/L		97	74 - 125
cis-1,2-Dichloroethene	<0.000714	U	0.0500	0.04463		mg/L		89	75 - 125
cis-1,3-Dichloropropene	<0.00107	U	0.0500	0.05278		mg/L		106	74 - 125
Dibromochloromethane	<0.000547	U	0.0500	0.05517		mg/L		110	73 - 125
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.0500	0.05140		mg/L		103	59 - 125
1,2-Dibromoethane	<0.000999	U	0.0500	0.04975		mg/L		99	73 - 125
1,2-Dichlorobenzene	<0.000509	U	0.0500	0.05177		mg/L		104	75 - 125
1,3-Dichlorobenzene	<0.000513	U	0.0500	0.05046		mg/L		101	75 - 125
1,4-Dichlorobenzene	<0.000513	U	0.0500	0.05117		mg/L		102	75 - 125
Dichlorodifluoromethane	<0.000919	U	0.0500	0.04320		mg/L		86	70 - 130
1,1-Dichloroethane	<0.000635	U	0.0500	0.04295		mg/L		86	72 - 125

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: 880-29967-1 MS

Client Sample ID: MW-1

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 109461

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	<0.000590	U	0.0500	0.05413		mg/L		108	68 - 127
1,1-Dichloroethene	<0.000738	U	0.0500	0.04500		mg/L		90	59 - 172
1,2-Dichloropropane	<0.000667	U	0.0500	0.04758		mg/L		95	74 - 125
1,3-Dichloropropane	<0.000514	U	0.0500	0.04852		mg/L		97	75 - 125
2,2-Dichloropropane	<0.000780	U	0.0500	0.04828		mg/L		97	75 - 125
1,1-Dichloropropene	<0.00160	U	0.0500	0.04672		mg/L		93	75 - 125
Ethylbenzene	<0.000411	U	0.0500	0.04997		mg/L		100	75 - 125
Hexachlorobutadiene	<0.00126	U	0.0500	0.05942		mg/L		119	75 - 125
Isopropylbenzene	<0.000613	U	0.0500	0.05253		mg/L		105	75 - 125
Methylene Chloride	<0.00173	U	0.0500	0.04318		mg/L		86	75 - 125
m,p-Xylenes	<0.00124	U	0.0500	0.05093		mg/L		102	75 - 125
MTBE	<0.00139	U	0.0500	0.04751		mg/L		95	65 - 135
Naphthalene	<0.00135	U	0.0500	0.05410		mg/L		108	70 - 130
n-Butylbenzene	<0.000644	U	0.0500	0.04845		mg/L		97	75 - 125
sec-Propylbenzene	<0.000498	U	0.0500	0.04806		mg/L		96	75 - 125
o-Xylene	<0.000551	U	0.0500	0.05057		mg/L		101	75 - 125
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.0500	0.05126		mg/L		103	75 - 125
sec-Butylbenzene	<0.000468	U	0.0500	0.04966		mg/L		99	75 - 125
Styrene	<0.000655	U	0.0500	0.05275		mg/L		105	75 - 125
tert-Butylbenzene	<0.000442	U	0.0500	0.05003		mg/L		100	75 - 125
1,1,1,2-Tetrachloroethane	<0.000644	U	0.0500	0.05258		mg/L		105	72 - 125
1,1,2,2-Tetrachloroethane	<0.000470	U	0.0500	0.04122		mg/L		82	74 - 125
Tetrachloroethene	<0.000801	U	0.0500	0.05314		mg/L		106	71 - 125
Toluene	<0.000475	U	0.0500	0.04585		mg/L		92	59 - 139
trans-1,2-Dichloroethene	<0.000945	U	0.0500	0.04715		mg/L		94	75 - 125
trans-1,3-Dichloropropene	<0.00127	U	0.0500	0.05227		mg/L		105	66 - 125
1,2,3-Trichlorobenzene	<0.00217	U	0.0500	0.05620		mg/L		112	75 - 137
1,2,4-Trichlorobenzene	<0.00175	U	0.0500	0.05929		mg/L		119	75 - 135
1,1,1-Trichloroethane	<0.00169	U	0.0500	0.04872		mg/L		97	75 - 125
1,1,2-Trichloroethane	<0.000511	U	0.0500	0.04838		mg/L		97	75 - 127
Trichloroethene	<0.000791	U	0.0500	0.05334		mg/L		107	62 - 137
Trichlorofluoromethane	<0.000638	U	0.0500	0.05211		mg/L		104	60 - 140
1,2,3-Trichloropropane	<0.000490	U	0.0500	0.04287		mg/L		86	75 - 125
1,2,4-Trimethylbenzene	<0.000417	U	0.0500	0.05003		mg/L		100	75 - 125
1,3,5-Trimethylbenzene	<0.000456	U	0.0500	0.04905		mg/L		98	70 - 125
Vinyl chloride	<0.000638	U	0.0500	0.04987		mg/L		100	60 - 140
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	92		74 - 124						
Dibromofluoromethane (Surr)	92		75 - 131						
1,2-Dichloroethane-d4 (Surr)	101		63 - 144						
Toluene-d8 (Surr)	98		80 - 120						

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109462/9

Matrix: Water

Analysis Batch: 109462

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/26/23 11:42	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/26/23 11:42	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/26/23 11:42	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/26/23 11:42	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/26/23 11:42	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/26/23 11:42	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/26/23 11:42	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/26/23 11:42	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/26/23 11:42	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/26/23 11:42	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/26/23 11:42	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/26/23 11:42	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/26/23 11:42	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/26/23 11:42	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/26/23 11:42	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/26/23 11:42	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/26/23 11:42	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 11:42	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/26/23 11:42	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/26/23 11:42	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 11:42	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/26/23 11:42	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 11:42	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/26/23 11:42	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/26/23 11:42	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/26/23 11:42	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/26/23 11:42	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/26/23 11:42	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/26/23 11:42	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/26/23 11:42	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/26/23 11:42	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/26/23 11:42	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/26/23 11:42	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/26/23 11:42	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 11:42	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/26/23 11:42	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/26/23 11:42	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 11:42	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/26/23 11:42	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/26/23 11:42	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/26/23 11:42	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/26/23 11:42	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/26/23 11:42	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/26/23 11:42	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/26/23 11:42	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/26/23 11:42	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/26/23 11:42	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/26/23 11:42	1

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109462/9

Matrix: Water

Analysis Batch: 109462

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			06/26/23 11:42	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/26/23 11:42	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/26/23 11:42	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/26/23 11:42	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/26/23 11:42	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/26/23 11:42	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/26/23 11:42	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/26/23 11:42	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/26/23 11:42	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/26/23 11:42	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/26/23 11:42	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/26/23 11:42	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/26/23 11:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		74 - 124				06/26/23 11:42	1
Dibromofluoromethane (Surr)	99		75 - 131				06/26/23 11:42	1
1,2-Dichloroethane-d4 (Surr)	108		63 - 144				06/26/23 11:42	1
Toluene-d8 (Surr)	100		80 - 120				06/26/23 11:42	1

Lab Sample ID: LCS 860-109462/3

Matrix: Water

Analysis Batch: 109462

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	0.05263		mg/L		105	75 - 125
Bromobenzene	0.0500	0.05196		mg/L		104	75 - 125
Bromochloromethane	0.0500	0.05428		mg/L		109	60 - 140
Bromodichloromethane	0.0500	0.05499		mg/L		110	75 - 125
Bromoform	0.0500	0.05120		mg/L		102	70 - 130
Bromomethane	0.0500	0.05901		mg/L		118	60 - 140
2-Butanone	0.250	0.2131		mg/L		85	60 - 140
Carbon tetrachloride	0.0500	0.04990		mg/L		100	70 - 130
Chlorobenzene	0.0500	0.05331		mg/L		107	65 - 135
Chloroethane	0.0500	0.06380		mg/L		128	60 - 140
Chloroform	0.0500	0.04883		mg/L		98	70 - 121
Chloromethane	0.0500	0.04648		mg/L		93	60 - 140
2-Chlorotoluene	0.0500	0.05074		mg/L		101	73 - 125
4-Chlorotoluene	0.0500	0.05078		mg/L		102	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04903		mg/L		98	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05340		mg/L		107	74 - 125
Dibromochloromethane	0.0500	0.05847		mg/L		117	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05222		mg/L		104	59 - 125
1,2-Dibromoethane	0.0500	0.05314		mg/L		106	73 - 125
1,2-Dichlorobenzene	0.0500	0.05325		mg/L		107	75 - 125
1,3-Dichlorobenzene	0.0500	0.05344		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05380		mg/L		108	75 - 125
Dichlorodifluoromethane	0.0500	0.05617		mg/L		112	50 - 150

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-109462/3

Matrix: Water

Analysis Batch: 109462

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	0.04696		mg/L		94	70 - 130
1,2-Dichloroethane	0.0500	0.05735		mg/L		115	72 - 130
1,1-Dichloroethene	0.0500	0.05146		mg/L		103	50 - 150
1,2-Dichloropropane	0.0500	0.04742		mg/L		95	74 - 125
1,3-Dichloropropane	0.0500	0.05240		mg/L		105	75 - 125
2,2-Dichloropropane	0.0500	0.05383		mg/L		108	75 - 125
1,1-Dichloropropene	0.0500	0.04957		mg/L		99	75 - 125
Ethylbenzene	0.0500	0.05285		mg/L		106	75 - 125
Hexachlorobutadiene	0.0500	0.05758		mg/L		115	75 - 125
Isopropylbenzene	0.0500	0.05547		mg/L		111	75 - 125
Methylene Chloride	0.0500	0.04557		mg/L		91	71 - 125
m,p-Xylenes	0.0500	0.05419		mg/L		108	75 - 125
MTBE	0.0500	0.05118		mg/L		102	65 - 135
Naphthalene	0.0500	0.05359		mg/L		107	70 - 130
n-Butylbenzene	0.0500	0.05142		mg/L		103	75 - 125
N-Propylbenzene	0.0500	0.05039		mg/L		101	75 - 125
o-Xylene	0.0500	0.05425		mg/L		108	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05446		mg/L		109	75 - 125
sec-Butylbenzene	0.0500	0.05265		mg/L		105	75 - 125
Styrene	0.0500	0.05694		mg/L		114	75 - 125
tert-Butylbenzene	0.0500	0.05309		mg/L		106	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05554		mg/L		111	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04401		mg/L		88	74 - 125
Tetrachloroethene	0.0500	0.05639		mg/L		113	71 - 125
Toluene	0.0500	0.04846		mg/L		97	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04916		mg/L		98	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05634		mg/L		113	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05635		mg/L		113	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05981		mg/L		120	75 - 135
1,1,1-Trichloroethane	0.0500	0.05389		mg/L		108	70 - 130
1,1,2-Trichloroethane	0.0500	0.05085		mg/L		102	70 - 130
Trichloroethene	0.0500	0.05423		mg/L		108	75 - 135
Trichlorofluoromethane	0.0500	0.06139		mg/L		123	60 - 140
1,2,3-Trichloropropane	0.0500	0.04529		mg/L		91	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05225		mg/L		105	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05184		mg/L		104	60 - 140
Vinyl chloride	0.0500	0.05584		mg/L		112	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		74 - 124
Dibromofluoromethane (Surr)	93		75 - 131
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
Toluene-d8 (Surr)	98		80 - 120

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-109462/4

Matrix: Water

Analysis Batch: 109462

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.05139		mg/L		103	75 - 125	2	25
Bromobenzene	0.0500	0.05483		mg/L		110	75 - 125	5	25
Bromochloromethane	0.0500	0.05570		mg/L		111	60 - 140	3	25
Bromodichloromethane	0.0500	0.05601		mg/L		112	75 - 125	2	25
Bromoform	0.0500	0.05139		mg/L		103	70 - 130	0	25
Bromomethane	0.0500	0.06795		mg/L		136	60 - 140	14	25
2-Butanone	0.250	0.2180		mg/L		87	60 - 140	2	25
Carbon tetrachloride	0.0500	0.04764		mg/L		95	70 - 130	5	25
Chlorobenzene	0.0500	0.05448		mg/L		109	65 - 135	2	25
Chloroethane	0.0500	0.06712		mg/L		134	60 - 140	5	25
Chloroform	0.0500	0.04914		mg/L		98	70 - 121	1	25
Chloromethane	0.0500	0.05315		mg/L		106	60 - 140	13	25
2-Chlorotoluene	0.0500	0.05236		mg/L		105	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05257		mg/L		105	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.05005		mg/L		100	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05544		mg/L		111	74 - 125	4	25
Dibromochloromethane	0.0500	0.05950		mg/L		119	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05377		mg/L		108	59 - 125	3	25
1,2-Dibromoethane	0.0500	0.05406		mg/L		108	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05637		mg/L		113	75 - 125	6	25
1,3-Dichlorobenzene	0.0500	0.05552		mg/L		111	75 - 125	4	25
1,4-Dichlorobenzene	0.0500	0.05599		mg/L		112	75 - 125	4	25
Dichlorodifluoromethane	0.0500	0.05837		mg/L		117	50 - 150	4	25
1,1-Dichloroethane	0.0500	0.04946		mg/L		99	70 - 130	5	25
1,2-Dichloroethane	0.0500	0.05681		mg/L		114	72 - 130	1	25
1,1-Dichloroethene	0.0500	0.05164		mg/L		103	50 - 150	0	25
1,2-Dichloropropane	0.0500	0.04901		mg/L		98	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.05271		mg/L		105	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.05579		mg/L		112	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.04919		mg/L		98	75 - 125	1	25
Ethylbenzene	0.0500	0.05376		mg/L		108	75 - 125	2	25
Hexachlorobutadiene	0.0500	0.05937		mg/L		119	75 - 125	3	25
Isopropylbenzene	0.0500	0.05719		mg/L		114	75 - 125	3	25
Methylene Chloride	0.0500	0.04668		mg/L		93	71 - 125	2	25
m,p-Xylenes	0.0500	0.05451		mg/L		109	75 - 125	1	25
MTBE	0.0500	0.05391		mg/L		108	65 - 135	5	25
Naphthalene	0.0500	0.05845		mg/L		117	70 - 130	9	25
n-Butylbenzene	0.0500	0.05381		mg/L		108	75 - 125	5	25
N-Propylbenzene	0.0500	0.05250		mg/L		105	75 - 125	4	25
o-Xylene	0.0500	0.05502		mg/L		110	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05702		mg/L		114	75 - 125	5	25
sec-Butylbenzene	0.0500	0.05504		mg/L		110	75 - 125	4	25
Styrene	0.0500	0.05700		mg/L		114	75 - 125	0	25
tert-Butylbenzene	0.0500	0.05536		mg/L		111	75 - 125	4	25
1,1,1,2-Tetrachloroethane	0.0500	0.05685		mg/L		114	72 - 125	2	25
1,1,2,2-Tetrachloroethane	0.0500	0.04554		mg/L		91	74 - 125	3	25
Tetrachloroethene	0.0500	0.05789		mg/L		116	71 - 125	3	25
Toluene	0.0500	0.04937		mg/L		99	70 - 130	2	25

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-109462/4

Matrix: Water

Analysis Batch: 109462

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	0.04887		mg/L		98	75 - 125	1	25
trans-1,3-Dichloropropene	0.0500	0.05723		mg/L		114	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.06156		mg/L		123	75 - 137	9	25
1,2,4-Trichlorobenzene	0.0500	0.06442		mg/L		129	75 - 135	7	25
1,1,1-Trichloroethane	0.0500	0.05494		mg/L		110	70 - 130	2	25
1,1,2-Trichloroethane	0.0500	0.05240		mg/L		105	70 - 130	3	25
Trichloroethene	0.0500	0.05504		mg/L		110	75 - 135	1	25
Trichlorofluoromethane	0.0500	0.06427		mg/L		129	60 - 140	5	25
1,2,3-Trichloropropane	0.0500	0.04858		mg/L		97	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.05540		mg/L		111	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.05472		mg/L		109	60 - 140	5	25
Vinyl chloride	0.0500	0.05931		mg/L		119	60 - 140	6	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	93		74 - 124
Dibromofluoromethane (Surr)	92		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: 880-29967-1 MS

Matrix: Water

Analysis Batch: 109462

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
Benzene	<0.000460	U	0.0500	0.04839		mg/L		97	66 - 142
Bromobenzene	<0.000665	U	0.0500	0.04933		mg/L		99	75 - 125
Bromochloromethane	<0.000657	U	0.0500	0.04999		mg/L		100	60 - 140
Bromodichloromethane	<0.000552	U	0.0500	0.05324		mg/L		106	75 - 125
Bromoform	<0.000633	U	0.0500	0.04639		mg/L		93	75 - 125
Bromomethane	<0.00142	U	0.0500	0.05493		mg/L		110	60 - 140
2-Butanone	<0.00828	U	0.250	0.1860		mg/L		74	60 - 140
Carbon tetrachloride	<0.000896	U	0.0500	0.04750		mg/L		95	62 - 125
Chlorobenzene	<0.000530	U	0.0500	0.05083		mg/L		102	60 - 133
Chloroethane	<0.00198	U	0.0500	0.05635		mg/L		113	60 - 140
Chloroform	<0.000643	U	0.0500	0.04497		mg/L		90	70 - 130
Chloromethane	<0.00204	U	0.0500	0.04482		mg/L		90	60 - 140
2-Chlorotoluene	<0.00118	U	0.0500	0.04795		mg/L		96	73 - 125
4-Chlorotoluene	<0.000472	U	0.0500	0.04830		mg/L		97	74 - 125
cis-1,2-Dichloroethene	<0.000714	U	0.0500	0.04463		mg/L		89	75 - 125
cis-1,3-Dichloropropene	<0.00107	U	0.0500	0.05278		mg/L		106	74 - 125
Dibromochloromethane	<0.000547	U	0.0500	0.05517		mg/L		110	73 - 125
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.0500	0.05140		mg/L		103	59 - 125
1,2-Dibromoethane	<0.000999	U	0.0500	0.04975		mg/L		99	73 - 125
1,2-Dichlorobenzene	<0.000509	U	0.0500	0.05177		mg/L		104	75 - 125
1,3-Dichlorobenzene	<0.000513	U	0.0500	0.05046		mg/L		101	75 - 125
1,4-Dichlorobenzene	<0.000513	U	0.0500	0.05117		mg/L		102	75 - 125
Dichlorodifluoromethane	<0.000919	U	0.0500	0.04320		mg/L		86	70 - 130
1,1-Dichloroethane	<0.000635	U	0.0500	0.04295		mg/L		86	72 - 125

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: 880-29967-1 MS

Client Sample ID: MW-1

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 109462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	<0.000590	U	0.0500	0.05413		mg/L		108	68 - 127
1,1-Dichloroethene	<0.000738	U	0.0500	0.04500		mg/L		90	59 - 172
1,2-Dichloropropane	<0.000667	U	0.0500	0.04758		mg/L		95	74 - 125
1,3-Dichloropropane	<0.000514	U	0.0500	0.04852		mg/L		97	75 - 125
2,2-Dichloropropane	<0.000780	U	0.0500	0.04828		mg/L		97	75 - 125
1,1-Dichloropropene	<0.00160	U	0.0500	0.04672		mg/L		93	75 - 125
Ethylbenzene	<0.000411	U	0.0500	0.04997		mg/L		100	75 - 125
Hexachlorobutadiene	<0.00126	U	0.0500	0.05942		mg/L		119	75 - 125
Isopropylbenzene	<0.000613	U	0.0500	0.05253		mg/L		105	75 - 125
Methylene Chloride	<0.00173	U	0.0500	0.04318		mg/L		86	75 - 125
m,p-Xylenes	<0.00124	U	0.0500	0.05093		mg/L		102	75 - 125
MTBE	<0.00139	U	0.0500	0.04751		mg/L		95	65 - 135
Naphthalene	<0.00135	U	0.0500	0.05410		mg/L		108	70 - 130
n-Butylbenzene	<0.000644	U	0.0500	0.04845		mg/L		97	75 - 125
N-Propylbenzene	<0.000498	U	0.0500	0.04806		mg/L		96	75 - 125
o-Xylene	<0.000551	U	0.0500	0.05057		mg/L		101	75 - 125
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.0500	0.05126		mg/L		103	75 - 125
sec-Butylbenzene	<0.000468	U	0.0500	0.04966		mg/L		99	75 - 125
Styrene	<0.000655	U	0.0500	0.05275		mg/L		105	75 - 125
tert-Butylbenzene	<0.000442	U	0.0500	0.05003		mg/L		100	75 - 125
1,1,1,2-Tetrachloroethane	<0.000644	U	0.0500	0.05258		mg/L		105	72 - 125
1,1,2,2-Tetrachloroethane	<0.000470	U	0.0500	0.04122		mg/L		82	74 - 125
Tetrachloroethene	<0.000801	U	0.0500	0.05314		mg/L		106	71 - 125
Toluene	<0.000475	U	0.0500	0.04585		mg/L		92	59 - 139
trans-1,2-Dichloroethene	<0.000945	U	0.0500	0.04715		mg/L		94	75 - 125
trans-1,3-Dichloropropene	<0.00127	U	0.0500	0.05227		mg/L		105	66 - 125
1,2,3-Trichlorobenzene	<0.00217	U	0.0500	0.05620		mg/L		112	75 - 137
1,2,4-Trichlorobenzene	<0.00175	U	0.0500	0.05929		mg/L		119	75 - 135
1,1,1-Trichloroethane	<0.00169	U	0.0500	0.04872		mg/L		97	75 - 125
1,1,2-Trichloroethane	<0.000511	U	0.0500	0.04838		mg/L		97	75 - 127
Trichloroethene	<0.000791	U	0.0500	0.05334		mg/L		107	62 - 137
Trichlorofluoromethane	<0.000638	U	0.0500	0.05211		mg/L		104	60 - 140
1,2,3-Trichloropropane	<0.000490	U	0.0500	0.04287		mg/L		86	75 - 125
1,2,4-Trimethylbenzene	<0.000417	U	0.0500	0.05003		mg/L		100	75 - 125
1,3,5-Trimethylbenzene	<0.000456	U	0.0500	0.04905		mg/L		98	70 - 125
Vinyl chloride	<0.000638	U	0.0500	0.04987		mg/L		100	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		74 - 124
Dibromofluoromethane (Surr)	92		75 - 131
1,2-Dichloroethane-d4 (Surr)	101		63 - 144
Toluene-d8 (Surr)	98		80 - 120

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109819/1-A

Matrix: Water

Analysis Batch: 109727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109819

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		06/27/23 14:20	06/28/23 03:35	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		06/27/23 14:20	06/28/23 03:35	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		06/27/23 14:20	06/28/23 03:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 135			06/27/23 14:20	06/28/23 03:35	1
o-Terphenyl	123		70 - 135			06/27/23 14:20	06/28/23 03:35	1

Lab Sample ID: LCS 860-109819/2-A

Matrix: Water

Analysis Batch: 109993

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	99.7	134.7		mg/L		135	70 - 135
Diesel Range Organics (Over C10-C28)	100	80.30		mg/L		80	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	102		70 - 135				
o-Terphenyl	82		70 - 135				

Lab Sample ID: LCSD 860-109819/3-A

Matrix: Water

Analysis Batch: 109993

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.7	132.4		mg/L		133	70 - 135	2	35
Diesel Range Organics (Over C10-C28)	100	79.48		mg/L		80	70 - 135	1	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 135						
o-Terphenyl	81		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-109419/3

Matrix: Water

Analysis Batch: 109419

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.250	U	0.500	0.250 mg/L			06/24/23 10:09	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/24/23 10:09	1
Sulfate	<0.200	U	0.500	0.200 mg/L			06/24/23 10:09	1

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-109419/4

Matrix: Water

Analysis Batch: 109419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
							Limits	
Chloride	10.0	9.864		mg/L		99	90 - 110	
Fluoride	10.0	10.34		mg/L		103	90 - 110	
Sulfate	10.0	9.079		mg/L		91	90 - 110	

Lab Sample ID: LCSD 860-109419/5

Matrix: Water

Analysis Batch: 109419

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
		Result	Qualifier			Limits	Limit		
Chloride	10.0	9.844		mg/L		98	90 - 110	0	20
Fluoride	10.0	10.32		mg/L		103	90 - 110	0	20
Sulfate	10.0	9.184		mg/L		92	90 - 110	1	20

Lab Sample ID: LLCS 860-109419/7

Matrix: Water

Analysis Batch: 109419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits	
							Limits	
Chloride	0.500	0.4950	J	mg/L		99	50 - 150	
Fluoride	0.500	0.5254		mg/L		105	50 - 150	
Sulfate	0.500	0.3778	J	mg/L		76	50 - 150	

Lab Sample ID: MB 860-109420/3

Matrix: Water

Analysis Batch: 109420

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Nitrate as N	<0.0391	U	0.100	0.0391 mg/L			06/24/23 10:09	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			06/24/23 10:09	1

Lab Sample ID: LCS 860-109420/4

Matrix: Water

Analysis Batch: 109420

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
							Limits	
Nitrate as N	10.0	9.942		mg/L		99	80 - 120	
Nitrite as N	10.0	10.01		mg/L		100	80 - 120	

Lab Sample ID: LCSD 860-109420/5

Matrix: Water

Analysis Batch: 109420

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

			Spike	LCSD	LCSD	%Rec			RPD		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Nitrate as N			10.0	9.932		mg/L		99	80 - 120	0	20
Nitrite as N			10.0	10.00		mg/L		100	80 - 120	0	20

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QC Sample Results

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-109600/3

Matrix: Water

Analysis Batch: 109600

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			06/26/23 10:39	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/26/23 10:39	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			06/26/23 10:39	1

Lab Sample ID: LCS 860-109600/4

Matrix: Water

Analysis Batch: 109600

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	251.4		mg/L		101	85 - 115

Lab Sample ID: LCSD 860-109600/5

Matrix: Water

Analysis Batch: 109600

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	251.2		mg/L		100	85 - 115	0	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-109840/1

Matrix: Water

Analysis Batch: 109840

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			06/27/23 15:56	1

Lab Sample ID: LCS 860-109840/2

Matrix: Water

Analysis Batch: 109840

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	42.80		mg/L		86	80 - 120

Lab Sample ID: LCSD 860-109840/3

Matrix: Water

Analysis Batch: 109840

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	42.80		mg/L		86	80 - 120	0	20

Lab Sample ID: 880-29967-2 MS

Matrix: Water

Analysis Batch: 109840

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	<0.495	U	50.0	41.20		mg/L		82	80 - 120

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QC Sample Results

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

Job ID: 880-29967-1

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

Lab Sample ID: 880-29967-2 MSD							Client Sample ID: MW-2					
Matrix: Water							Prep Type: Total/NA					
Analysis Batch: 109840												
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	41.20		mg/L		82	80 - 120	0	20	

QC Association Summary

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 109461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	8260C	
880-29967-2	MW-2	Total/NA	Water	8260C	
MB 860-109461/9	Method Blank	Total/NA	Water	8260C	
LCS 860-109461/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-109461/4	Lab Control Sample Dup	Total/NA	Water	8260C	
880-29967-1 MS	MW-1	Total/NA	Water	8260C	

Analysis Batch: 109462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	8260C	
MB 860-109462/9	Method Blank	Total/NA	Water	8260C	
LCS 860-109462/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-109462/4	Lab Control Sample Dup	Total/NA	Water	8260C	
880-29967-1 MS	MW-1	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 101425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	8015 NM	
880-29967-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 109727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	8015B NM	109819
880-29967-2	MW-2	Total/NA	Water	8015B NM	109819
MB 860-109819/1-A	Method Blank	Total/NA	Water	8015B NM	109819

Prep Batch: 109819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-29967-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-109819/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-109819/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-109819/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 109993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-109819/2-A	Lab Control Sample	Total/NA	Water	8015B NM	109819
LCSD 860-109819/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	109819

HPLC/IC

Analysis Batch: 109419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	300.0	
880-29967-2	MW-2	Total/NA	Water	300.0	
MB 860-109419/3	Method Blank	Total/NA	Water	300.0	
LCS 860-109419/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109419/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-109419/7	Lab Control Sample	Total/NA	Water	300.0	

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QC Association Summary

Client: Ensolum

Job ID: 880-29967-1

Project/Site: South Hobbs - 03B1417002

HPLC/IC

Analysis Batch: 109420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	300.0	
880-29967-2	MW-2	Total/NA	Water	300.0	
MB 860-109420/3	Method Blank	Total/NA	Water	300.0	
LCS 860-109420/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109420/5	Lab Control Sample Dup	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 109600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	SM 2320B	
880-29967-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-109600/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-109600/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-109600/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 109736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-29967-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 109840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-29967-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-109840/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-109840/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-109840/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-29967-2 MS	MW-2	Total/NA	Water	SM 4500 S2 F	
880-29967-2 MSD	MW-2	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 110497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29967-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-29967-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

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Lab Chronicle

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-29967-1

Client Sample ID: MW-1

Date Collected: 06/23/23 10:20

Date Received: 06/23/23 14:54

Lab Sample ID: 880-29967-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	109461	AN	EET HOU	06/26/23 12:39
Total/NA	Analysis	8260C		1	109462	AN	EET HOU	06/26/23 12:39
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/26/23 13:18
Total/NA	Prep	8015NM Aq Prep			109819	SAR	EET HOU	06/27/23 14:20
Total/NA	Analysis	8015B NM		1	109727	T1S	EET HOU	06/28/23 03:55
Total/NA	Analysis	300.0		1	109419	WP	EET HOU	06/24/23 17:48
Total/NA	Analysis	300.0		1	109420	WP	EET HOU	06/24/23 17:48
Total/NA	Analysis	SM 2320B		1	109600	TL	EET HOU	06/26/23 14:07
Total/NA	Analysis	SM 4500 CO2 D		1	110497	MC	EET HOU	06/30/23 15:04
Total/NA	Analysis	SM 4500 H+ B		1	109736	TL	EET HOU	06/26/23 19:08
Total/NA	Analysis	SM 4500 S2 F		1	109840	SCI	EET HOU	06/27/23 15:56

Client Sample ID: MW-2

Date Collected: 06/23/23 11:15

Date Received: 06/23/23 14:54

Lab Sample ID: 880-29967-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	109461	AN	EET HOU	06/26/23 13:17
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/26/23 13:18
Total/NA	Prep	8015NM Aq Prep			109819	SAR	EET HOU	06/27/23 14:20
Total/NA	Analysis	8015B NM		1	109727	T1S	EET HOU	06/28/23 04:14
Total/NA	Analysis	300.0		1	109419	WP	EET HOU	06/24/23 18:06
Total/NA	Analysis	300.0		1	109420	WP	EET HOU	06/24/23 18:06
Total/NA	Analysis	SM 2320B		1	109600	TL	EET HOU	06/26/23 14:19
Total/NA	Analysis	SM 4500 CO2 D		1	110497	MC	EET HOU	06/30/23 15:04
Total/NA	Analysis	SM 4500 H+ B		1	109736	TL	EET HOU	06/26/23 19:11
Total/NA	Analysis	SM 4500 S2 F		1	109840	SCI	EET HOU	06/27/23 15:56

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: 880-29967-1

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	T104704215-23-50	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: 880-29967-1

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	EPA	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:

EPA = US Environmental Protection Agency

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: 880-29967-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-29967-1	MW-1	Water	06/23/23 10:20	06/23/23 14:54
880-29967-2	MW-2	Water	06/23/23 11:15	06/23/23 14:54

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

Work Order No.

1962

www.xenco.com Page 1 of 1

Project Manager	Beaux Jennings	Bill to (if different)	
Company Name	Ensolum LLC	Company Name	
Address	601 Marrenfeld #400	Address	
City, State ZIP	Midland TX 79701	City, State ZIP	
Phone	432-230-3344	Email	bjenning@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	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
Temperature (°C).	1-31.0		Thermometer ID
Received intact.	(Yes) No		
Cooler Custody Seals.	Yes No	N/A	Correction Factor:
Sample Custody Seals.	Yes No	N/A	Total Containers:

ANALYSIS REQUEST		Work Order Notes
Number of Containers		TAT starts the day received by the lab, if received by 4:30pm
Reduced Carbon Dioxide 4500 CO2 c		
Reduced Sulfide SW-846 #376.2		
V-846 #8260		
A Method #8015		
EPA Method #846 300		
SW-846 Method 150.1		

[illegible]

880-29967 Chain of Custody



Total 200.7 / 6010 200.8 / 6020:

[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 with 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 with Xenco.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		02/23/23			
		1454			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29967-1

Login Number: 29967

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-29967-1

Login Number: 29967

List Number: 2

Creator: Pena, Jesiel

List Source: Eurofins Houston

List Creation: 06/24/23 01:34 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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Beaux Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/30/2023 4:34:09 PM

JOB DESCRIPTION

South Hobbs - 03B1417002
South Hobbs

JOB NUMBER

880-30041-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
6/30/2023 4:34:09 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

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

Laboratory Job ID: 880-30041-1

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Definitions/Glossary

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

Job ID: 880-30041-1

Qualifiers

GC/MS VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Definitions/Glossary

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

Job ID: 880-30041-1

Glossary (Continued)

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

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Case Narrative

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

Job ID: 880-30041-1

Job ID: 880-30041-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-30041-1****Receipt**

The samples were received on 6/27/2023 10:13 AM. 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 0.1°C

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) associated with batch 860-109976 recovered above the upper control limit for 1,2,4-Trichlorobenzene and Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 860-109976/2).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 860-109976 recovered outside control limits for the following analytes: 1,2,3-Trichlorobenzene, Naphthalene and 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-109981 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been qualified and reported.

Method 300_ORGFMS: The following sample(s) was received with less than 1 hour remaining on the holding time. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: MW-2 (880-30041-2).

Method 300_ORGFMS: The method blank for analytical batch 860-109982 contained Nitrite as N above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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: 880-30041-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-30041-1

Date Collected: 06/26/23 10:50

Matrix: Water

Date Received: 06/27/23 10:13

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/28/23 18:55	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/28/23 18:55	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/28/23 18:55	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/28/23 18:55	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/28/23 18:55	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/28/23 18:55	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/28/23 18:55	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/28/23 18:55	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/28/23 18:55	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/28/23 18:55	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/28/23 18:55	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/28/23 18:55	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/28/23 18:55	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/28/23 18:55	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/28/23 18:55	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/28/23 18:55	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/28/23 18:55	1
1,2-Dibromo-3-Chloropropane	<0.00127	U *	0.00500	0.00127 mg/L			06/28/23 18:55	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/28/23 18:55	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/28/23 18:55	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 18:55	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 18:55	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/28/23 18:55	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/28/23 18:55	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/28/23 18:55	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/28/23 18:55	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/28/23 18:55	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/28/23 18:55	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/28/23 18:55	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/28/23 18:55	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/28/23 18:55	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/28/23 18:55	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/28/23 18:55	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/28/23 18:55	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/28/23 18:55	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/28/23 18:55	1
Naphthalene	<0.00135	U *	0.0100	0.00135 mg/L			06/28/23 18:55	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 18:55	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/28/23 18:55	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/28/23 18:55	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/28/23 18:55	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/28/23 18:55	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/28/23 18:55	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/28/23 18:55	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 18:55	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/28/23 18:55	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/28/23 18:55	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/28/23 18:55	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/28/23 18:55	1

Eurofins Midland

Client Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-30041-1

Date Collected: 06/26/23 10:50

Matrix: Water

Date Received: 06/27/23 10:13

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/28/23 18:55	1
1,2,3-Trichlorobenzene	<0.00217	U **	0.00500	0.00217 mg/L			06/28/23 18:55	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/28/23 18:55	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/28/23 18:55	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/28/23 18:55	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/28/23 18:55	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/28/23 18:55	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/28/23 18:55	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/28/23 18:55	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/28/23 18:55	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/28/23 18:55	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/28/23 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		06/28/23 18:55	1
Dibromofluoromethane (Surr)	102		75 - 131		06/28/23 18:55	1
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		06/28/23 18:55	1
Toluene-d8 (Surr)	102		80 - 120		06/28/23 18:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.920	U	4.66	0.920 mg/L			06/30/23 17:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.920	U	4.66	0.920 mg/L		06/30/23 09:40	06/30/23 13:37	1
Diesel Range Organics (Over C10-C28)	<0.920	U	4.66	0.920 mg/L		06/30/23 09:40	06/30/23 13:37	1
Oil Range Organics (Over C28-C36)	<0.888	U	4.66	0.888 mg/L		06/30/23 09:40	06/30/23 13:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 135			06/30/23 09:40	06/30/23 13:37	1
o-Terphenyl	94		70 - 135			06/30/23 09:40	06/30/23 13:37	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.3		0.500	0.250 mg/L			06/28/23 11:07	1
Nitrate as N	0.0804	J	0.100	0.0391 mg/L			06/28/23 11:07	1
Fluoride	0.347	J	0.500	0.100 mg/L			06/28/23 11:07	1
Nitrite as N	2.38	B	0.100	0.0293 mg/L			06/28/23 11:07	1
Sulfate	35.8		0.500	0.200 mg/L			06/28/23 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	738		4.00	4.00 mg/L			06/29/23 14:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	738		4.00	4.00 mg/L			06/29/23 14:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00 mg/L			06/29/23 14:23	1
Carbon dioxide (SM 4500 CO2 D)	835			mg/L			06/30/23 15:04	1

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Client Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-30041-1

Date Collected: 06/26/23 10:50

Matrix: Water

Date Received: 06/27/23 10:13

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon Dioxide, Free (SM 4500 CO2 D)	186			mg/L			06/30/23 15:04	1
pH (SM 4500 H+ B)	6.9	HF		SU			06/28/23 15:38	1
Temperature (SM 4500 H+ B)	20.3	HF		Degrees C			06/28/23 15:38	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495 mg/L			06/29/23 15:54	1

Client Sample ID: MW-2

Lab Sample ID: 880-30041-2

Date Collected: 06/26/23 09:30

Matrix: Water

Date Received: 06/27/23 10:13

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0161		0.00100	0.000460 mg/L			06/28/23 19:16	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/28/23 19:16	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/28/23 19:16	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/28/23 19:16	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/28/23 19:16	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/28/23 19:16	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/28/23 19:16	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/28/23 19:16	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/28/23 19:16	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/28/23 19:16	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/28/23 19:16	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/28/23 19:16	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/28/23 19:16	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/28/23 19:16	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/28/23 19:16	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/28/23 19:16	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/28/23 19:16	1
1,2-Dibromo-3-Chloropropane	<0.00127	U *	0.00500	0.00127 mg/L			06/28/23 19:16	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/28/23 19:16	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/28/23 19:16	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 19:16	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 19:16	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/28/23 19:16	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/28/23 19:16	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/28/23 19:16	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/28/23 19:16	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/28/23 19:16	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/28/23 19:16	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/28/23 19:16	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/28/23 19:16	1
Ethylbenzene	0.0163		0.00100	0.000411 mg/L			06/28/23 19:16	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/28/23 19:16	1
Isopropylbenzene	0.00672		0.00100	0.000613 mg/L			06/28/23 19:16	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/28/23 19:16	1
m,p-Xylenes	0.0553		0.0100	0.00124 mg/L			06/28/23 19:16	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/28/23 19:16	1
Naphthalene	<0.00135	U *	0.0100	0.00135 mg/L			06/28/23 19:16	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 19:16	1

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Client Sample Results

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

Job ID: 880-30041-1

Client Sample ID: MW-2

Lab Sample ID: 880-30041-2

Date Collected: 06/26/23 09:30

Matrix: Water

Date Received: 06/27/23 10:13

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	0.00234		0.00100	0.000498 mg/L			06/28/23 19:16	1
o-Xylene	0.0148		0.00100	0.000551 mg/L			06/28/23 19:16	1
p-Cymene (p-Isopropyltoluene)	0.000958	J	0.00100	0.000919 mg/L			06/28/23 19:16	1
sec-Butylbenzene	0.00105		0.00100	0.000468 mg/L			06/28/23 19:16	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/28/23 19:16	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/28/23 19:16	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 19:16	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/28/23 19:16	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/28/23 19:16	1
Toluene	0.00327		0.00100	0.000475 mg/L			06/28/23 19:16	1
trans-1,2-Dichloroethene	<0.000945	U	0.00100	0.000945 mg/L			06/28/23 19:16	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/28/23 19:16	1
1,2,3-Trichlorobenzene	<0.00217	U *	0.00500	0.00217 mg/L			06/28/23 19:16	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/28/23 19:16	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/28/23 19:16	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/28/23 19:16	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/28/23 19:16	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/28/23 19:16	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/28/23 19:16	1
1,2,4-Trimethylbenzene	0.0330		0.00100	0.000417 mg/L			06/28/23 19:16	1
1,3,5-Trimethylbenzene	0.00840		0.00100	0.000456 mg/L			06/28/23 19:16	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/28/23 19:16	1
Xylenes, Total	0.0701		0.0100	0.00124 mg/L			06/28/23 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		74 - 124		06/28/23 19:16	1
Dibromofluoromethane (Surr)	97		75 - 131		06/28/23 19:16	1
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		06/28/23 19:16	1
Toluene-d8 (Surr)	103		80 - 120		06/28/23 19:16	1

Method: SW846 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			06/30/23 17:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.929	U	4.70	0.929 mg/L		06/30/23 09:40	06/30/23 14:00	1
Diesel Range Organics (Over C10-C28)	<0.929	U	4.70	0.929 mg/L		06/30/23 09:40	06/30/23 14:00	1
Oil Range Organics (Over C28-C36)	<0.897	U	4.70	0.897 mg/L		06/30/23 09:40	06/30/23 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 135	06/30/23 09:40	06/30/23 14:00	1
o-Terphenyl	75		70 - 135	06/30/23 09:40	06/30/23 14:00	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.0		0.500	0.250 mg/L			06/28/23 10:48	1
Nitrate as N	0.162	H	0.100	0.0391 mg/L			06/28/23 10:48	1
Fluoride	<0.100	U	0.500	0.100 mg/L			06/28/23 10:48	1

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Client Sample Results

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

Job ID: 880-30041-1

Client Sample ID: MW-2
Date Collected: 06/26/23 09:30
Date Received: 06/27/23 10:13

Lab Sample ID: 880-30041-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	6.73	H B	0.100	0.0293	mg/L			06/28/23 10:48	1
Sulfate	90.5		0.500	0.200	mg/L			06/28/23 10:48	1
General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	1340		4.00	4.00	mg/L			06/29/23 14:40	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	1340		4.00	4.00	mg/L			06/29/23 14:40	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			06/29/23 14:40	1
Carbon dioxide (SM 4500 CO2 D)	2250				mg/L			06/30/23 15:04	1
Carbon Dioxide, Free (SM 4500 CO2 D)	1070				mg/L			06/30/23 15:04	1
pH (SM 4500 H+ B)	6.4	HF			SU			06/28/23 15:41	1
Temperature (SM 4500 H+ B)	20.6	HF			Degrees C			06/28/23 15:41	1
Sulfide (SM 4500 S2 F)	<0.495	U	5.00	0.495	mg/L			06/29/23 15:54	1

Surrogate Summary

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

Job ID: 880-30041-1

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	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-120)
880-30041-1	MW-1	102	102	106	102
880-30041-2	MW-2	99	97	101	103
LCS 860-109976/3	Lab Control Sample	101	101	101	101
LCSD 860-109976/4	Lab Control Sample Dup	103	108	100	102
MB 860-109976/10	Method Blank	102	102	103	102
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	OTPH1
		(70-135)	(70-135)
880-30041-1	MW-1	88	94
880-30041-2	MW-2	71	75
LCS 860-110412/2-A	Lab Control Sample	101	117
LCSD 860-110412/3-A	Lab Control Sample Dup	102	118
MB 860-110412/1-A	Method Blank	105	109
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109976/10

Matrix: Water

Analysis Batch: 109976

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000460	U	0.00100	0.000460 mg/L			06/28/23 16:04	1
Bromobenzene	<0.000665	U	0.00100	0.000665 mg/L			06/28/23 16:04	1
Bromochloromethane	<0.000657	U	0.00100	0.000657 mg/L			06/28/23 16:04	1
Bromodichloromethane	<0.000552	U	0.00100	0.000552 mg/L			06/28/23 16:04	1
Bromoform	<0.000633	U	0.00500	0.000633 mg/L			06/28/23 16:04	1
Bromomethane	<0.00142	U	0.00500	0.00142 mg/L			06/28/23 16:04	1
2-Butanone	<0.00828	U	0.0500	0.00828 mg/L			06/28/23 16:04	1
Carbon tetrachloride	<0.000896	U	0.00500	0.000896 mg/L			06/28/23 16:04	1
Chlorobenzene	<0.000530	U	0.00100	0.000530 mg/L			06/28/23 16:04	1
Chloroethane	<0.00198	U	0.0100	0.00198 mg/L			06/28/23 16:04	1
Chloroform	<0.000643	U	0.00100	0.000643 mg/L			06/28/23 16:04	1
Chloromethane	<0.00204	U	0.0100	0.00204 mg/L			06/28/23 16:04	1
2-Chlorotoluene	<0.00118	U	0.00200	0.00118 mg/L			06/28/23 16:04	1
4-Chlorotoluene	<0.000472	U	0.00100	0.000472 mg/L			06/28/23 16:04	1
cis-1,2-Dichloroethene	<0.000714	U	0.00100	0.000714 mg/L			06/28/23 16:04	1
cis-1,3-Dichloropropene	<0.00107	U	0.00500	0.00107 mg/L			06/28/23 16:04	1
Dibromochloromethane	<0.000547	U	0.00500	0.000547 mg/L			06/28/23 16:04	1
1,2-Dibromo-3-Chloropropane	<0.00127	U	0.00500	0.00127 mg/L			06/28/23 16:04	1
1,2-Dibromoethane	<0.000999	U	0.00500	0.000999 mg/L			06/28/23 16:04	1
1,2-Dichlorobenzene	<0.000509	U	0.00100	0.000509 mg/L			06/28/23 16:04	1
1,3-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 16:04	1
1,4-Dichlorobenzene	<0.000513	U	0.00100	0.000513 mg/L			06/28/23 16:04	1
Dichlorodifluoromethane	<0.000919	U	0.00100	0.000919 mg/L			06/28/23 16:04	1
1,1-Dichloroethane	<0.000635	U	0.00100	0.000635 mg/L			06/28/23 16:04	1
1,2-Dichloroethane	<0.000590	U	0.00100	0.000590 mg/L			06/28/23 16:04	1
1,1-Dichloroethene	<0.000738	U	0.00100	0.000738 mg/L			06/28/23 16:04	1
1,2-Dichloropropane	<0.000667	U	0.00500	0.000667 mg/L			06/28/23 16:04	1
1,3-Dichloropropane	<0.000514	U	0.00500	0.000514 mg/L			06/28/23 16:04	1
2,2-Dichloropropane	<0.000780	U	0.00500	0.000780 mg/L			06/28/23 16:04	1
1,1-Dichloropropene	<0.00160	U	0.00500	0.00160 mg/L			06/28/23 16:04	1
Ethylbenzene	<0.000411	U	0.00100	0.000411 mg/L			06/28/23 16:04	1
Hexachlorobutadiene	<0.00126	U	0.00500	0.00126 mg/L			06/28/23 16:04	1
Isopropylbenzene	<0.000613	U	0.00100	0.000613 mg/L			06/28/23 16:04	1
Methylene Chloride	<0.00173	U	0.00500	0.00173 mg/L			06/28/23 16:04	1
m,p-Xylenes	<0.00124	U	0.0100	0.00124 mg/L			06/28/23 16:04	1
MTBE	<0.00139	U	0.00500	0.00139 mg/L			06/28/23 16:04	1
Naphthalene	<0.00135	U	0.0100	0.00135 mg/L			06/28/23 16:04	1
n-Butylbenzene	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 16:04	1
N-Propylbenzene	<0.000498	U	0.00100	0.000498 mg/L			06/28/23 16:04	1
o-Xylene	<0.000551	U	0.00100	0.000551 mg/L			06/28/23 16:04	1
p-Cymene (p-Isopropyltoluene)	<0.000919	U	0.00100	0.000919 mg/L			06/28/23 16:04	1
sec-Butylbenzene	<0.000468	U	0.00100	0.000468 mg/L			06/28/23 16:04	1
Styrene	<0.000655	U	0.00100	0.000655 mg/L			06/28/23 16:04	1
tert-Butylbenzene	<0.000442	U	0.00100	0.000442 mg/L			06/28/23 16:04	1
1,1,1,2-Tetrachloroethane	<0.000644	U	0.00100	0.000644 mg/L			06/28/23 16:04	1
1,1,2,2-Tetrachloroethane	<0.000470	U	0.00100	0.000470 mg/L			06/28/23 16:04	1
Tetrachloroethene	<0.000801	U	0.00100	0.000801 mg/L			06/28/23 16:04	1
Toluene	<0.000475	U	0.00100	0.000475 mg/L			06/28/23 16:04	1

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-109976/10

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 109976

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			06/28/23 16:04	1
trans-1,3-Dichloropropene	<0.00127	U	0.00500	0.00127 mg/L			06/28/23 16:04	1
1,2,3-Trichlorobenzene	<0.00217	U	0.00500	0.00217 mg/L			06/28/23 16:04	1
1,2,4-Trichlorobenzene	<0.00175	U	0.00500	0.00175 mg/L			06/28/23 16:04	1
1,1,1-Trichloroethane	<0.00169	U	0.00500	0.00169 mg/L			06/28/23 16:04	1
1,1,2-Trichloroethane	<0.000511	U	0.00100	0.000511 mg/L			06/28/23 16:04	1
Trichloroethene	<0.000791	U	0.00500	0.000791 mg/L			06/28/23 16:04	1
Trichlorofluoromethane	<0.000638	U	0.00100	0.000638 mg/L			06/28/23 16:04	1
1,2,3-Trichloropropane	<0.000490	U	0.00100	0.000490 mg/L			06/28/23 16:04	1
1,2,4-Trimethylbenzene	<0.000417	U	0.00100	0.000417 mg/L			06/28/23 16:04	1
1,3,5-Trimethylbenzene	<0.000456	U	0.00100	0.000456 mg/L			06/28/23 16:04	1
Vinyl chloride	<0.000638	U	0.00200	0.000638 mg/L			06/28/23 16:04	1
Xylenes, Total	<0.00124	U	0.0100	0.00124 mg/L			06/28/23 16:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124				06/28/23 16:04	1
Dibromofluoromethane (Surr)	102		75 - 131				06/28/23 16:04	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144				06/28/23 16:04	1
Toluene-d8 (Surr)	102		80 - 120				06/28/23 16:04	1

Lab Sample ID: LCS 860-109976/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 109976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05460		mg/L		109	75 - 125
Bromobenzene	0.0500	0.05549		mg/L		111	75 - 125
Bromochloromethane	0.0500	0.05531		mg/L		111	60 - 140
Bromodichloromethane	0.0500	0.05296		mg/L		106	75 - 125
Bromoform	0.0500	0.05464		mg/L		109	70 - 130
Bromomethane	0.0500	0.04294		mg/L		86	60 - 140
2-Butanone	0.250	0.2474		mg/L		99	60 - 140
Carbon tetrachloride	0.0500	0.05286		mg/L		106	70 - 130
Chlorobenzene	0.0500	0.05463		mg/L		109	65 - 135
Chloroethane	0.0500	0.04538		mg/L		91	60 - 140
Chloroform	0.0500	0.05477		mg/L		110	70 - 121
Chloromethane	0.0500	0.04533		mg/L		91	60 - 140
2-Chlorotoluene	0.0500	0.05698		mg/L		114	73 - 125
4-Chlorotoluene	0.0500	0.05513		mg/L		110	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05433		mg/L		109	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05481		mg/L		110	74 - 125
Dibromochloromethane	0.0500	0.05288		mg/L		106	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.06277	*+	mg/L		126	59 - 125
1,2-Dibromoethane	0.0500	0.05397		mg/L		108	73 - 125
1,2-Dichlorobenzene	0.0500	0.05700		mg/L		114	75 - 125
1,3-Dichlorobenzene	0.0500	0.05776		mg/L		116	75 - 125
1,4-Dichlorobenzene	0.0500	0.05641		mg/L		113	75 - 125
Dichlorodifluoromethane	0.0500	0.04639		mg/L		93	50 - 150

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-109976/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 109976

Analyte	Spike	LCS	LCS			%Rec	
	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethane	0.0500	0.05453		mg/L		109	70 - 130
1,2-Dichloroethane	0.0500	0.05505		mg/L		110	72 - 130
1,1-Dichloroethene	0.0500	0.05378		mg/L		108	50 - 150
1,2-Dichloropropane	0.0500	0.05480		mg/L		110	74 - 125
1,3-Dichloropropane	0.0500	0.05362		mg/L		107	75 - 125
2,2-Dichloropropane	0.0500	0.05192		mg/L		104	75 - 125
1,1-Dichloropropene	0.0500	0.05580		mg/L		112	75 - 125
Ethylbenzene	0.0500	0.05510		mg/L		110	75 - 125
Hexachlorobutadiene	0.0500	0.05775		mg/L		115	75 - 125
Isopropylbenzene	0.0500	0.05556		mg/L		111	75 - 125
Methylene Chloride	0.0500	0.04973		mg/L		99	71 - 125
m,p-Xylenes	0.0500	0.05641		mg/L		113	75 - 125
MTBE	0.0500	0.05344		mg/L		107	65 - 135
Naphthalene	0.0500	0.07472	*+	mg/L		149	70 - 130
n-Butylbenzene	0.0500	0.05770		mg/L		115	75 - 125
N-Propylbenzene	0.0500	0.05771		mg/L		115	75 - 125
o-Xylene	0.0500	0.05556		mg/L		111	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05786		mg/L		116	75 - 125
sec-Butylbenzene	0.0500	0.05700		mg/L		114	75 - 125
Styrene	0.0500	0.05677		mg/L		114	75 - 125
tert-Butylbenzene	0.0500	0.05705		mg/L		114	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05415		mg/L		108	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05657		mg/L		113	74 - 125
Tetrachloroethene	0.0500	0.05485		mg/L		110	71 - 125
Toluene	0.0500	0.05383		mg/L		108	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05401		mg/L		108	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05447		mg/L		109	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.07036	*+	mg/L		141	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.06448		mg/L		129	75 - 135
1,1,1-Trichloroethane	0.0500	0.05381		mg/L		108	70 - 130
1,1,2-Trichloroethane	0.0500	0.05342		mg/L		107	70 - 130
Trichloroethene	0.0500	0.05391		mg/L		108	75 - 135
Trichlorofluoromethane	0.0500	0.04854		mg/L		97	60 - 140
1,2,3-Trichloropropane	0.0500	0.05635		mg/L		113	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05785		mg/L		116	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05654		mg/L		113	60 - 140
Vinyl chloride	0.0500	0.04514		mg/L		90	60 - 140

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	101		75 - 131
1,2-Dichloroethane-d4 (Surr)	101		63 - 144
Toluene-d8 (Surr)	101		80 - 120

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-109976/4

Matrix: Water

Analysis Batch: 109976

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
Benzene	0.0500	0.05085		mg/L		102	75 - 125	7	25
Bromobenzene	0.0500	0.05376		mg/L		108	75 - 125	3	25
Bromochloromethane	0.0500	0.05655		mg/L		113	60 - 140	2	25
Bromodichloromethane	0.0500	0.04850		mg/L		97	75 - 125	9	25
Bromoform	0.0500	0.05151		mg/L		103	70 - 130	6	25
Bromomethane	0.0500	0.04536		mg/L		91	60 - 140	5	25
2-Butanone	0.250	0.2601		mg/L		104	60 - 140	5	25
Carbon tetrachloride	0.0500	0.05423		mg/L		108	70 - 130	3	25
Chlorobenzene	0.0500	0.05171		mg/L		103	65 - 135	5	25
Chloroethane	0.0500	0.04958		mg/L		99	60 - 140	9	25
Chloroform	0.0500	0.05577		mg/L		112	70 - 121	2	25
Chloromethane	0.0500	0.04804		mg/L		96	60 - 140	6	25
2-Chlorotoluene	0.0500	0.05266		mg/L		105	73 - 125	8	25
4-Chlorotoluene	0.0500	0.05334		mg/L		107	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.05568		mg/L		111	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05066		mg/L		101	74 - 125	8	25
Dibromochloromethane	0.0500	0.05022		mg/L		100	73 - 125	5	25
1,2-Dibromo-3-Chloropropane	0.0500	0.06277	*+	mg/L		126	59 - 125	0	25
1,2-Dibromoethane	0.0500	0.05129		mg/L		103	73 - 125	5	25
1,2-Dichlorobenzene	0.0500	0.05615		mg/L		112	75 - 125	2	25
1,3-Dichlorobenzene	0.0500	0.05608		mg/L		112	75 - 125	3	25
1,4-Dichlorobenzene	0.0500	0.05503		mg/L		110	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.04870		mg/L		97	50 - 150	5	25
1,1-Dichloroethane	0.0500	0.05529		mg/L		111	70 - 130	1	25
1,2-Dichloroethane	0.0500	0.05014		mg/L		100	72 - 130	9	25
1,1-Dichloroethene	0.0500	0.05484		mg/L		110	50 - 150	2	25
1,2-Dichloropropane	0.0500	0.05013		mg/L		100	74 - 125	9	25
1,3-Dichloropropane	0.0500	0.05107		mg/L		102	75 - 125	5	25
2,2-Dichloropropane	0.0500	0.05509		mg/L		110	75 - 125	6	25
1,1-Dichloropropene	0.0500	0.05717		mg/L		114	75 - 125	2	25
Ethylbenzene	0.0500	0.05288		mg/L		106	75 - 125	4	25
Hexachlorobutadiene	0.0500	0.05826		mg/L		117	75 - 125	1	25
Isopropylbenzene	0.0500	0.05383		mg/L		108	75 - 125	3	25
Methylene Chloride	0.0500	0.05063		mg/L		101	71 - 125	2	25
m,p-Xylenes	0.0500	0.05332		mg/L		107	75 - 125	6	25
MTBE	0.0500	0.05509		mg/L		110	65 - 135	3	25
Naphthalene	0.0500	0.07814	*+	mg/L		156	70 - 130	4	25
n-Butylbenzene	0.0500	0.05729		mg/L		115	75 - 125	1	25
N-Propylbenzene	0.0500	0.05637		mg/L		113	75 - 125	2	25
o-Xylene	0.0500	0.05294		mg/L		106	75 - 125	5	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05693		mg/L		114	75 - 125	2	25
sec-Butylbenzene	0.0500	0.05604		mg/L		112	75 - 125	2	25
Styrene	0.0500	0.05377		mg/L		108	75 - 125	5	25
tert-Butylbenzene	0.0500	0.05645		mg/L		113	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.05100		mg/L		102	72 - 125	6	25
1,1,2,2-Tetrachloroethane	0.0500	0.05566		mg/L		111	74 - 125	2	25
Tetrachloroethene	0.0500	0.05172		mg/L		103	71 - 125	6	25
Toluene	0.0500	0.05127		mg/L		103	70 - 130	5	25

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QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-109976/4

Matrix: Water

Analysis Batch: 109976

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
	Added	Result	Qualifier				Limits		
trans-1,2-Dichloroethene	0.0500	0.05463		mg/L		109	75 - 125	1	25
trans-1,3-Dichloropropene	0.0500	0.05215		mg/L		104	66 - 125	4	25
1,2,3-Trichlorobenzene	0.0500	0.07299	*+	mg/L		146	75 - 137	4	25
1,2,4-Trichlorobenzene	0.0500	0.06507		mg/L		130	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.05429		mg/L		109	70 - 130	1	25
1,1,2-Trichloroethane	0.0500	0.05119		mg/L		102	70 - 130	4	25
Trichloroethene	0.0500	0.04901		mg/L		98	75 - 135	10	25
Trichlorofluoromethane	0.0500	0.05375		mg/L		107	60 - 140	10	25
1,2,3-Trichloropropane	0.0500	0.05661		mg/L		113	75 - 125	0	25
1,2,4-Trimethylbenzene	0.0500	0.05714		mg/L		114	75 - 125	1	25
1,3,5-Trimethylbenzene	0.0500	0.04989		mg/L		100	60 - 140	13	25
Vinyl chloride	0.0500	0.04973		mg/L		99	60 - 140	10	25

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	108		75 - 131
1,2-Dichloroethane-d4 (Surr)	100		63 - 144
Toluene-d8 (Surr)	102		80 - 120

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

Lab Sample ID: MB 860-110412/1-A

Matrix: Water

Analysis Batch: 110365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110412

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<0.988	U	5.00	0.988 mg/L		06/30/23 09:40	06/30/23 12:56	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		06/30/23 09:40	06/30/23 12:56	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		06/30/23 09:40	06/30/23 12:56	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	105		70 - 135	06/30/23 09:40	06/30/23 12:56	1
o-Terphenyl	109		70 - 135	06/30/23 09:40	06/30/23 12:56	1

Lab Sample ID: LCS 860-110412/2-A

Matrix: Water

Analysis Batch: 110365

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110412

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits
Gasoline Range Organics (GRO)-C6-C10	99.4	131.6		mg/L		132	70 - 135
Diesel Range Organics (Over C10-C28)	99.6	116.4		mg/L		117	70 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	101		70 - 135
o-Terphenyl	117		70 - 135

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-110412/3-A

Matrix: Water

Analysis Batch: 110365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110412

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.4	133.6		mg/L		134	70 - 135	1	35
Diesel Range Organics (Over C10-C28)	99.6	118.5		mg/L		119	70 - 135	2	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	102		70 - 135						
o-Terphenyl	118		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-109981/7

Matrix: Water

Analysis Batch: 109981

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.250	U	0.500	mg/L			06/28/23 11:26	1
Fluoride	<0.100	U	0.500	mg/L			06/28/23 11:26	1
Sulfate	<0.200	U	0.500	mg/L			06/28/23 11:26	1

Lab Sample ID: LCS 860-109981/8

Matrix: Water

Analysis Batch: 109981

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	9.656		mg/L		97	90 - 110
Fluoride	10.0	10.03		mg/L		100	90 - 110
Sulfate	10.0	9.465		mg/L		95	90 - 110

Lab Sample ID: LCSD 860-109981/9

Matrix: Water

Analysis Batch: 109981

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	9.742		mg/L		97	90 - 110	1	20
Fluoride	10.0	10.10		mg/L		101	90 - 110	1	20
Sulfate	10.0	9.566		mg/L		96	90 - 110	1	20

Lab Sample ID: LLCS 860-109981/11

Matrix: Water

Analysis Batch: 109981

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	0.4797	J	mg/L		96	50 - 150
Fluoride	0.500	0.3520	J	mg/L		70	50 - 150
Sulfate	0.500	0.3903	J	mg/L		78	50 - 150

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-109982/7

Matrix: Water

Analysis Batch: 109982

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			06/28/23 11:26	1
Nitrite as N	0.06279	J	0.100	0.0293 mg/L			06/28/23 11:26	1

Lab Sample ID: LCS 860-109982/8

Matrix: Water

Analysis Batch: 109982

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	9.789		mg/L		98	80 - 120
Nitrite as N	10.0	9.728		mg/L		97	80 - 120

Lab Sample ID: LCSD 860-109982/9

Matrix: Water

Analysis Batch: 109982

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	9.878		mg/L		99	80 - 120	1	20
Nitrite as N	10.0	9.845		mg/L		98	80 - 120	1	20

Lab Sample ID: LLCS 860-109982/10

Matrix: Water

Analysis Batch: 109982

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	0.09222	J	mg/L		92	50 - 150
Nitrite as N	0.100	0.06754	J	mg/L		68	50 - 150

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-110289/3

Matrix: Water

Analysis Batch: 110289

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			06/29/23 11:45	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/29/23 11:45	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			06/29/23 11:45	1

Lab Sample ID: LCS 860-110289/4

Matrix: Water

Analysis Batch: 110289

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	256.1		mg/L		102	85 - 115

Eurofins Midland

QC Sample Results

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-110289/5

Matrix: Water

Analysis Batch: 110289

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	251.6		mg/L		101	85 - 115	2	20

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-30041-1 DU

Matrix: Water

Analysis Batch: 110075

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.9	HF	6.9		SU		0	20
Temperature	20.3	HF	20.3		Degrees C		0	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-110279/1

Matrix: Water

Analysis Batch: 110279

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			06/29/23 15:54	1

Lab Sample ID: LCS 860-110279/2

Matrix: Water

Analysis Batch: 110279

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	43.00		mg/L		86	80 - 120

Lab Sample ID: LCSD 860-110279/3

Matrix: Water

Analysis Batch: 110279

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	43.00		mg/L		86	80 - 120	0	20

Lab Sample ID: 880-30041-1 MS

Matrix: Water

Analysis Batch: 110279

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	41.80		mg/L		84	80 - 120

Lab Sample ID: 880-30041-1 MSD

Matrix: Water

Analysis Batch: 110279

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	41.80		mg/L		84	80 - 120	0	20

Eurofins Midland

QC Association Summary

Client: Ensolum

Job ID: 880-30041-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 109976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	8260C	
880-30041-2	MW-2	Total/NA	Water	8260C	
MB 860-109976/10	Method Blank	Total/NA	Water	8260C	
LCS 860-109976/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-109976/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 101425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	8015 NM	
880-30041-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 110365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	8015B NM	110412
880-30041-2	MW-2	Total/NA	Water	8015B NM	110412
MB 860-110412/1-A	Method Blank	Total/NA	Water	8015B NM	110412
LCS 860-110412/2-A	Lab Control Sample	Total/NA	Water	8015B NM	110412
LCSD 860-110412/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	110412

Prep Batch: 110412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-30041-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-110412/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-110412/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-110412/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 109981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	300.0	
880-30041-2	MW-2	Total/NA	Water	300.0	
MB 860-109981/7	Method Blank	Total/NA	Water	300.0	
LCS 860-109981/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109981/9	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-109981/11	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 109982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	300.0	
880-30041-2	MW-2	Total/NA	Water	300.0	
MB 860-109982/7	Method Blank	Total/NA	Water	300.0	
LCS 860-109982/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-109982/9	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-109982/10	Lab Control Sample	Total/NA	Water	300.0	

Eurofins Midland

QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-30041-1

General Chemistry

Analysis Batch: 110075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-30041-2	MW-2	Total/NA	Water	SM 4500 H+ B	
880-30041-1 DU	MW-1	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 110279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-30041-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-110279/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-110279/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-110279/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-30041-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-30041-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 110289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	SM 2320B	
880-30041-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-110289/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-110289/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-110289/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 110497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30041-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-30041-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Lab Chronicle

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-30041-1

Client Sample ID: MW-1

Date Collected: 06/26/23 10:50

Date Received: 06/27/23 10:13

Lab Sample ID: 880-30041-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	109976	AN	EET HOU	06/28/23 18:55
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/30/23 17:25
Total/NA	Prep	8015NM Aq Prep			110412	SAR	EET HOU	06/30/23 09:40
Total/NA	Analysis	8015B NM		1	110365	MCA	EET HOU	06/30/23 13:37
Total/NA	Analysis	300.0		1	109981	RBNS	EET HOU	06/28/23 11:07
Total/NA	Analysis	300.0		1	109982	RBNS	EET HOU	06/28/23 11:07
Total/NA	Analysis	SM 2320B		1	110289	TL	EET HOU	06/29/23 14:23
Total/NA	Analysis	SM 4500 CO2 D		1	110497	MC	EET HOU	06/30/23 15:04
Total/NA	Analysis	SM 4500 H+ B		1	110075	TL	EET HOU	06/28/23 15:38
Total/NA	Analysis	SM 4500 S2 F		1	110279	SCI	EET HOU	06/29/23 15:54

Client Sample ID: MW-2

Date Collected: 06/26/23 09:30

Date Received: 06/27/23 10:13

Lab Sample ID: 880-30041-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	109976	AN	EET HOU	06/28/23 19:16
Total/NA	Analysis	8015 NM		1	101425	CZT	EET HOU	06/30/23 17:25
Total/NA	Prep	8015NM Aq Prep			110412	SAR	EET HOU	06/30/23 09:40
Total/NA	Analysis	8015B NM		1	110365	MCA	EET HOU	06/30/23 14:00
Total/NA	Analysis	300.0		1	109981	RBNS	EET HOU	06/28/23 10:48
Total/NA	Analysis	300.0		1	109982	RBNS	EET HOU	06/28/23 10:48
Total/NA	Analysis	SM 2320B		1	110289	TL	EET HOU	06/29/23 14:40
Total/NA	Analysis	SM 4500 CO2 D		1	110497	MC	EET HOU	06/30/23 15:04
Total/NA	Analysis	SM 4500 H+ B		1	110075	TL	EET HOU	06/28/23 15:41
Total/NA	Analysis	SM 4500 S2 F		1	110279	SCI	EET HOU	06/29/23 15:54

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: 880-30041-1

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	T104704215-23-50	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: 880-30041-1

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	EPA	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:
EPA = US Environmental Protection Agency
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: 880-30041-1

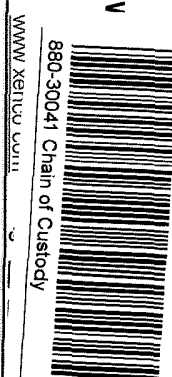
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-30041-1	MW-1	Water	06/26/23 10:50	06/27/23 10:13
880-30041-2	MW-2	Water	06/26/23 09:30	06/27/23 10:13

- 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) 509-3333
Midland, TX (432-704-5440) El Paso TX (915) 565-3443 Lubbock TX (806) 794-1296
Phoenix, AZ (480-355-0800) Atlanta GA (770-449-8800) Tampa FL (813) 251-1111
Hobbs NM (575-392-7550)



880-30041 Chain of Custody

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

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ 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							
			500 CO2 c	76.2	00				

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice	Yes	No
Temperature (°C)	Thermometer ID						
Received Intact	(Yes) No						
Cooler Custody Seals	Yes	No	N/A		Correction Factor	-30	
Sample Custody Seals	Yes	No	N/A		Total Containers		

Number of Containers

SW-846 #8260

Method #8015

EPA Method #846 3

SW-846 Method 150.1

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

[illegible]

Total 200.7 / 6010 200.8 / 6020:

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

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn Ii V Zn

TC1P / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
1631 / 2451 / 7470 / 7474 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 \$8 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 		6/27/23	2		
3		6/28	4		
5			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-30041-1

Login Number: 30041

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-30041-1

Login Number: 30041

List Number: 2

Creator: Canadilla, Surelis

List Source: Eurofins Houston

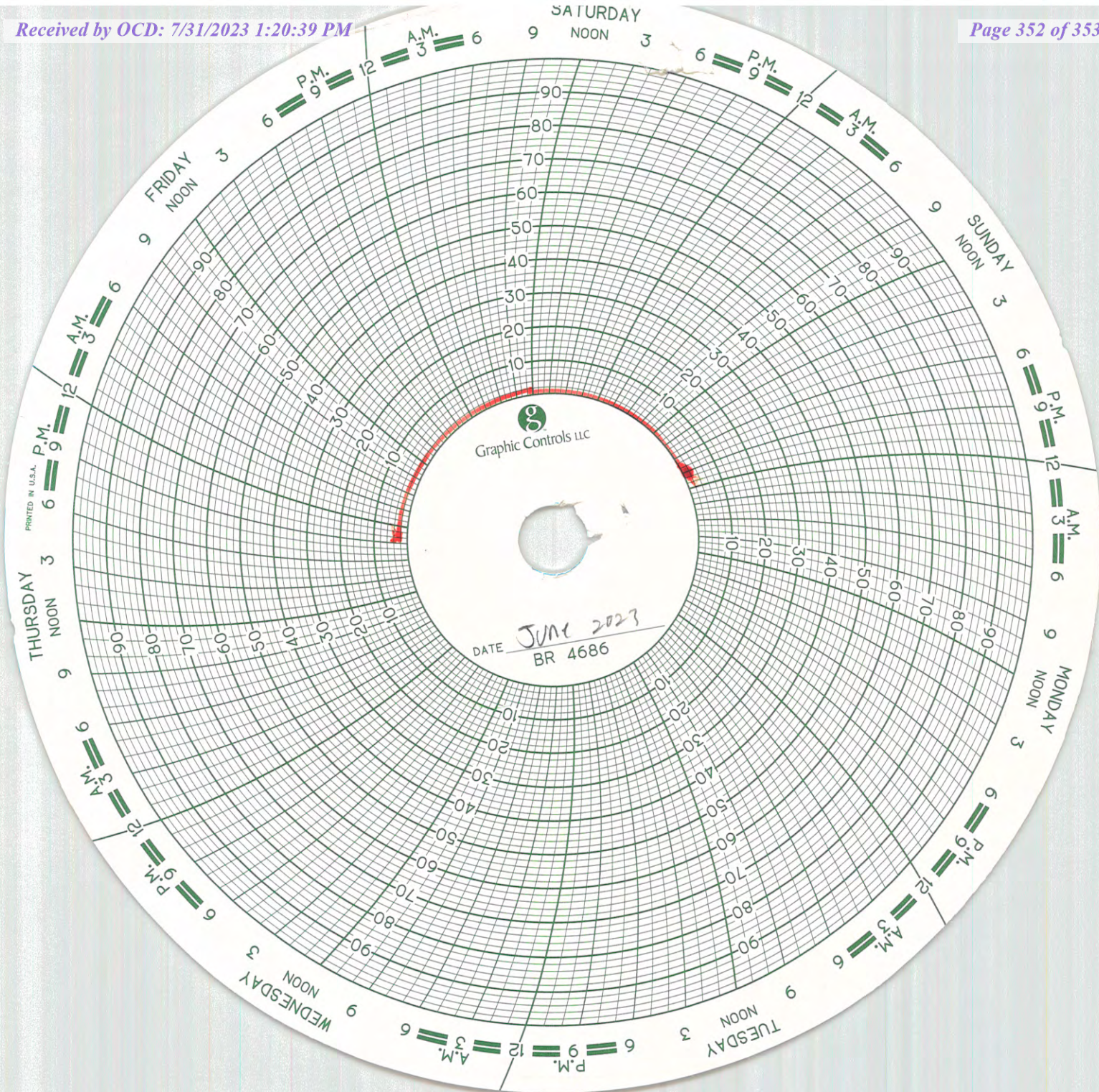
List Creation: 06/28/23 10:10 AM

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?	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	



APPENDIX D

Levey Well Pressure Reading 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 246158

CONDITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID:	157984
	Action Number:	246158
	Action Type:	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	The following monthly report has been accepted for the record: GAS MITIGATION MONTHLY REPORT - JUNE 2023 Property: South Hobbs G/SA Unit Order No. R-4934-F, Case No. 14981 Incident ID No. nAPP2227033082	3/15/2024