



GAS MITIGATION MONTHLY REPORT - DECEMBER 2021

Property:

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

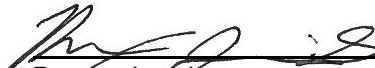
**New Mexico EMNRD OCD
Order No. R-4934-F, Case No. 14981**

January 20, 2022

Prepared for:

**Occidental Permian LTD
6001 Deauville Blvd.
Midland, Texas 79706
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Prepared by:


Beaux Jennings
Senior Project Manager

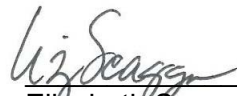

Elizabeth Scaggs
Principal



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

1.0 INTRODUCTION

1.1 Site Description & Background

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

This Gas Mitigation Monthly Report - December 2021 summarizes activities subsequent to the *Gas Mitigation Monthly Report - November 2021*, dated December 14, 2021. 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 (2) monitoring wells (MW-1 and MW-2) are referred to as the "Site".

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

On June 30, 2019, elevated pressure was observed at the Levey Well. At the request of the New Mexico Oil Conservation Division (NMOCD), localized area wells were "shut in" from operational use. Over time, the pressure being observed at the Levey Well declined until pressure was no longer recorded. Observations and water analysis of the Levey water well did identify free gas in the well bore; however, pressure from the underlying groundwater-bearing zone was no longer present.

Operational data was analyzed as part of the area wide assessment and adjacent wells investigated as potential sources for the gas infiltration. During maintenance operations at SHU #183, located approximately 575 feet southwest of the Levey Well, the SHU #183 well string was pulled, and pressures measured for proof of casing integrity. During these operations, SHU #183 was found to have a casing leak, which is believed to be the source of the pressure observed at Levey well. In response, OXY plugged the SHU #183 well to surface. No other anomalies were observed in the adjacent area oil and gas wells.

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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 (2) 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 (2) 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 December 29, 2021. The groundwater samples collected from the monitoring wells (MW-1 and MW-2) were analyzed for total petroleum hydrocarbons (TPH), gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO) utilizing Environmental Protection Agency (EPA) Method 8015M, volatile organic compounds (VOCs) utilizing EPA Method SW-846 #8260 (full list), carbon dioxide utilizing Standard Method 4500 CO₂ C, dissolved sulfide utilizing EPA Method SW-846 #376.2, chloride using EPA Method SW-846 #300.0 and pH utilizing EPA Method SW-846 #150.1. The groundwater samples collected from the Levey Well were analyzed for VOCs, recoverable metals per ICP by EPA 200.7, inorganic anions by EPA 300/300.1, pH by SM4500-H, total dissolved solids (TDS) by SM2540C, alkalinity by SM2320B and cation-anion balance by SM1030E.

During the December 2021 groundwater sampling event the groundwater samples did not exhibit constituent concentrations above New Mexico Water Quality Control Commission (WQCC) *Groundwater Quality Standards* (GQSs), with the exception of benzene and TDS. Benzene concentrations ranged from non-detect to 0.00611 milligrams per liter (mg/L) in the Levey Well and from 0.0189 mg/L to 0.0377 mg/L in monitoring well MW-2. However, the trendline shows benzene concentrations are decreasing overall in the Levey Well and monitoring well MW-2 during the duration of the air sampling events. TDS analytical results ranged from 1,040 mg/L to 1,280 mg/L, which exceeds the applicable WQCC GQS of 1,000 mg/L. 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 data related to the SHU localized wells to ensure tracking of production and injection activities as related to the re-start of these area operations. No anomalies were observed in the area oil and gas wells that could contribute free gas into the groundwater-bearing zone.

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To mitigate potential exposures, the Levey residence was purchased by OXY and remains unoccupied. A passive vent was installed on the Levey Well to mitigate safety and explosivity concerns for the residential and work area. There has been no detectable build-up of pressure in the Levey Well or monitoring wells MW-1 and MW-2. Hydrogen sulfide (H_2S) has not been detected in any of the three (3) aforementioned wells since July 15, 2020. All detections of H_2S prior to July 15, 2020 were within the well bore. No H_2S above permissible exposure limits was observed outside of the well bores.

OXY installed pressure reading charts at the Levey Well to measure the potential for any returning pressure at the well. These charts measure pressure 24 hours a day and show that no pressure has returned to the Levey Well. Monitoring wells MW-1 and MW-2 were physically monitored for the presence of gas and pressure on several dates from 7/1/2020 to 1/3/2022, with no pressure observed in either monitoring well. The pressure reading charts available for December 2021 are included in **Appendix D**.

The data indicates that pressure sourced from SHU #183 contributed to the infiltration of free gas into the red beds just beneath the groundwater-bearing zone, creating a pressurized pool of gas that traveled to the Levey Well. Once SHU #183 was plugged, the pressure source was removed from the red beds and overlying groundwater-bearing zone and the remaining free gases below remain pooling within the red bed underlying the groundwater-bearing zone. This is supported by the data described above and is consistent with findings reported in two (2) 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.

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 December 1 - 29, 2021 was approximately 573,427 gallons. Prior to initiating the vacuum recovery events, it was noted that the flow meter on the Levey Well had been previously damaged. The flow meter was subsequently replaced by OXY personnel.

1.3 Gas Recovery – Levey Well

OXY conducted two (2) vacuum recovery events during the month of December 2021 with positive results as shown on **Table 4** in **Appendix B**. The purpose of these events is 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 January 2022 once every two (2) weeks until the sampling results of the air is minimal after displacement of the overlying pressure, or the process proves to become ineffective.

2.0 AIR AND GROUNDWATER MONITORING

2.1 Air Sampling Program

Levey Well

The air samples on December 6 and 20, 2021 were taken prior to, during, and subsequent to each vacuum event utilizing a Summa[®] passivated canister. Upon arrival at the Site, the Levey Well is turned off and allowed to stabilize for approximately one (1) hour. An air sample is taken after one (1) hour of the Levey Well stabilization, prior to initiating the vacuum event. The vacuum is applied to the Levey Well for a duration of approximately one (1) hour. Approximately 15 minutes and 45 minutes into the event, an air sample is taken. The vacuum is then turned off and an additional air sample from the Levey Well is taken one (1) hour subsequent to each vacuum event. Water was not recovered during either vacuum 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 December 2021 sampling events are provided in **Appendix C**.

2.2 Groundwater Sampling Program

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

Levey Well

As of July 1, 2021, the Levey water well runs full time and 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 (1) hour prior to sampling. Once the Levey Well is properly purged and readings from the YSI Pro Plus stabilize, a groundwater sample is collected.

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 (1) groundwater sample is collected from each monitoring well.

The groundwater samples collected from the 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 (3) to five (5) minutes. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for three (3) successive readings.

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

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

3.0 DATA EVALUTATION

3.1 Air Samples

Gas mitigation activities at the Levey Well began on November 8, 2021 and will continue on a bi-weekly basis through January 2022. Based on the concentrations observed in the Levey Well air samples, the vacuum events are drawing the free gas over to the Levey Well. Prior to each vacuum recovery event, an air sample is taken to give a representative snapshot of static conditions of gas in the subsurface. Elevated concentrations of acetone, cyclohexane, ethanol, heptane, n-hexane, 2-propanol, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m&p-xylene, o-xylene and TPH were observed prior to the initiation of each vacuum recovery event.

Once initiated, an air sample is taken at 15 minutes and 45 minutes into the vacuum recovery event. During each of the vacuum recovery events, acetone, cyclohexane, ethanol, heptane, n-hexane, 2-propanol, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m&p-xylene, o-xylene and TPH concentrations significantly decrease throughout the duration of the event.

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

Air samples are also collected on a bi-weekly basis approximately one (1) week subsequent to the vacuum recovery event. During each of the bi-weekly air sampling events, elevated concentrations of acetone, cyclohexane, ethanol, heptane, n-hexane, 2-propanol, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m&p-xylene, o-xylene and 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 December 2021 groundwater samples collected from the Levey Well and monitoring wells MW-1 and MW-2 to the New Mexico WQCC GQSs. The results of the groundwater sample analyses are summarized in **Table 1** through **Table 3** of **Appendix B**. All analytical results were below the WQCC GQSs, with the exception of the analytes, as discussed below.

Levey Well

TDS analytical results ranged from 1,040 mg/L to 1,280 mg/L, which exceeds the applicable WQCC GQS of 1,000 mg/L. 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 (3) 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, 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.

In addition, the chloride concentrations in the Levey Well have significantly decreased over time. As of September 21, 2021, chloride no longer exceeds the WQCC GQS of 250.0 mg/l.

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 0.0189 mg/L to 0.0377 mg/L, which exceed the WQCC GQS of 0.005 mg/L. All other VOC concentrations were either below the laboratory reporting limit or below the WQCC GQS protective concentrations. All laboratory reporting limits were below the WQCC GQS protective concentrations, indicating a lack of dissolved phase gas infiltration into the localized groundwater.

The groundwater samples collected from monitoring wells MW-1 and MW-2 did not exhibit chloride concentrations above the WQCC GQS of 250.0 mg/l.

3.0 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 (4) months of readings (**Appendix D**) which show that the pressures and gas readings are very consistent with pre-injection background, including, but not limited to carbon dioxide. The plugging of the SHU #183 well has shown to be effective in discontinuing the source of free gas related to the Levey water well.

Based on the results of all monitoring activities, OXY has the following recommendations and/or requests of action:

- **Continue to remove free gas accumulations from the underlying red bed and groundwater-bearing zone as mechanically practical to do so, and to acceptable levels of removal to achieve compliance expectations;**
- **Continue to monitor the Levey Well and monitoring wells MW-1 and MW-2 for significant changes in pressure, which could indicate a secondary source weekly, until compliance of free gas removal is achieved;**
- **Institute groundwater sampling on a quarterly basis in 2022 or until compliance is achieved, and;**
- **OXY formally requests NMOCD approve Oxy to re-start injection in South Hobbs G/SA Unit #290 production/injection well.**

4.0 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.

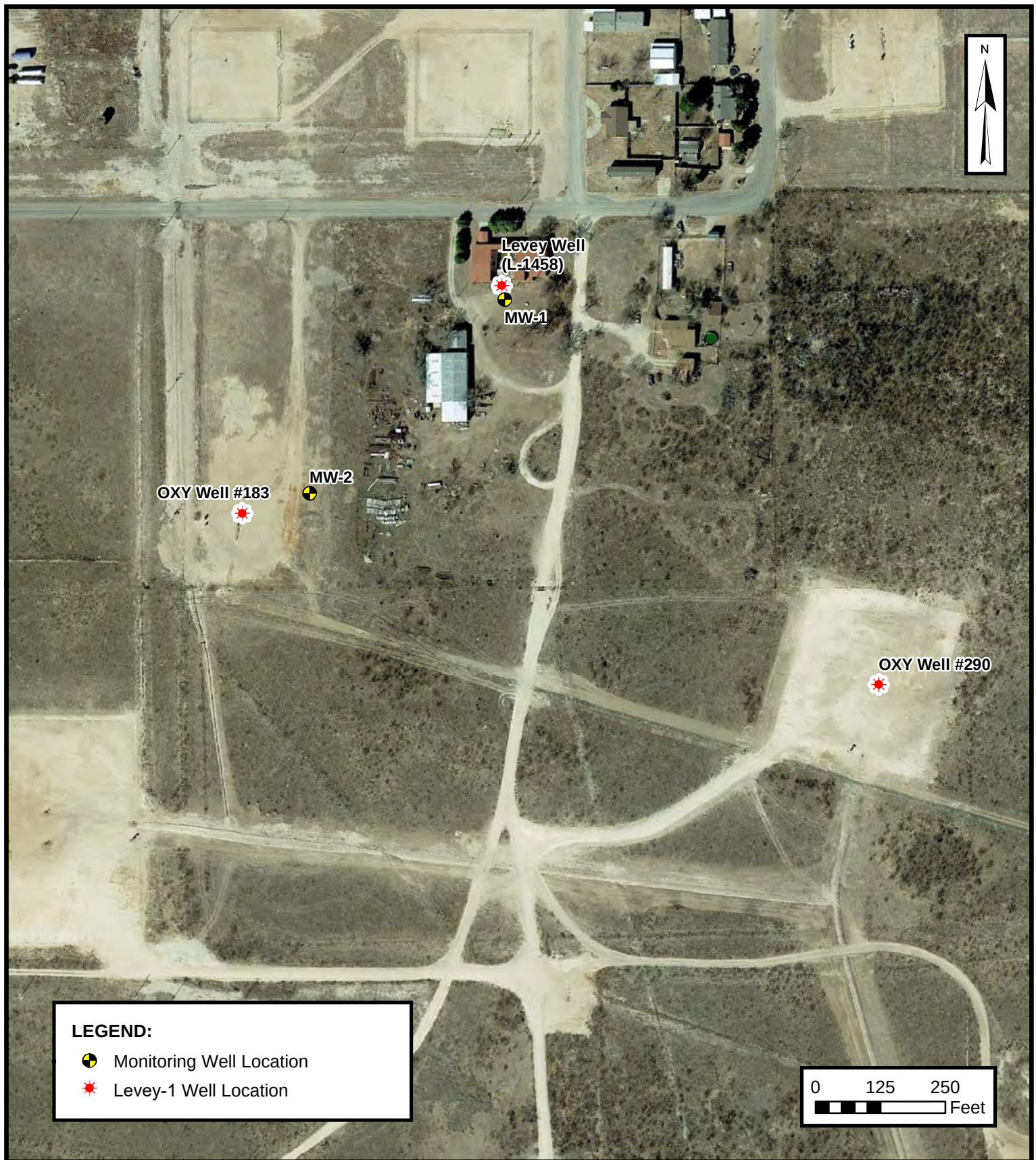
Gorody, A.W., 2012. Factors affecting the variability of stray gas concentration and composition in groundwater. Environ. Geosci. 19, 17–31.
<https://doi.org/10.1306/eg.12081111013>

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



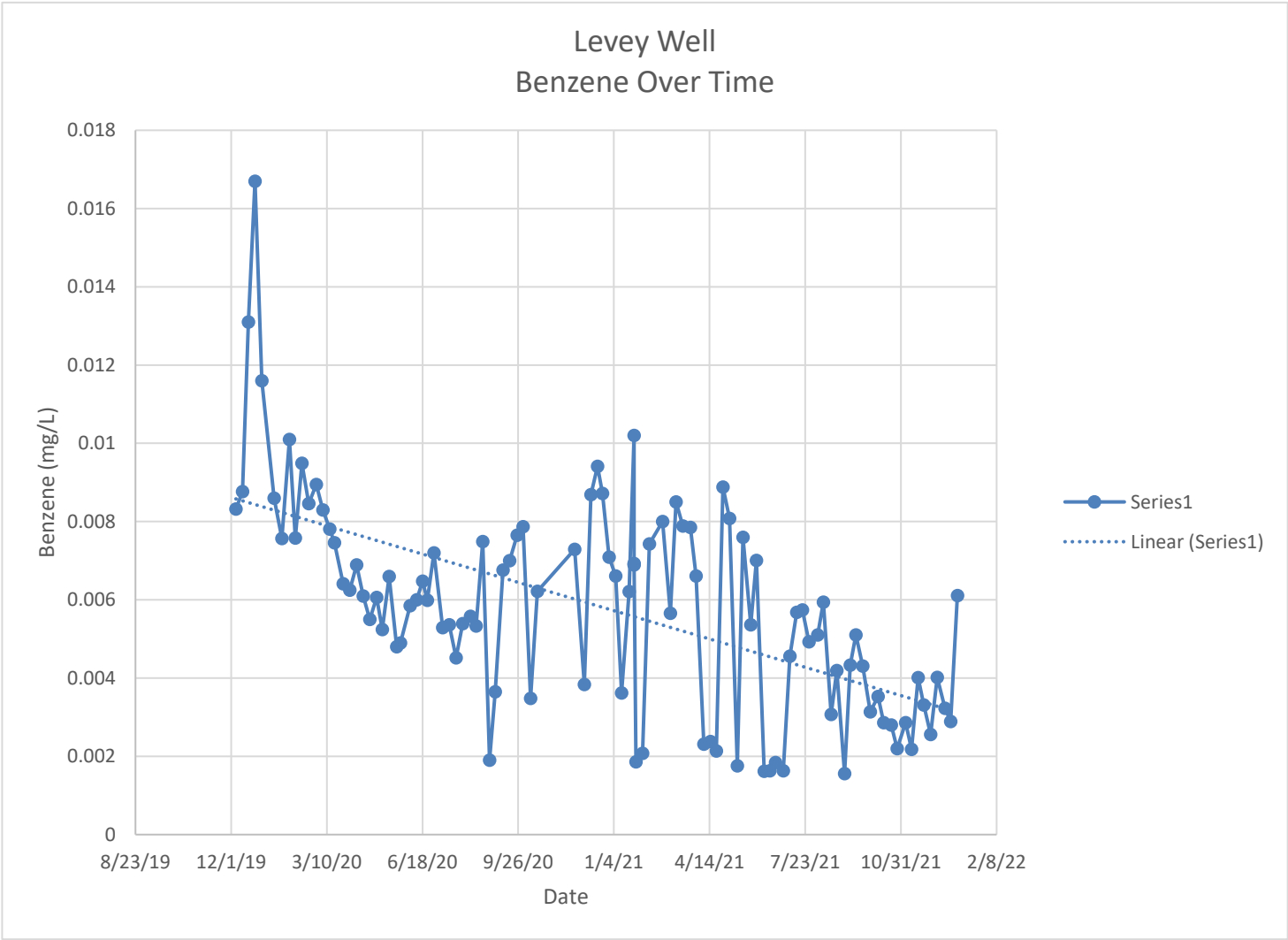
SITE MAP

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

PROJECT NUMBER: 03B1417001

FIGURE

1





APPENDIX B

Tables

TABLE 1 - GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY																										
Permian EOR - Levey Well Hobbs, New Mexico																										
Well ID	Date	VOCs (mg/l)																								
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloroethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	cis-1,2-Dichloroethylene	1,1-Dichloropropane	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.1	NE	NE	NE	NE	0.005	NE	NE	NE	0.03	NE	0.01	0.1	NE	NE
Levey Well	12/6/2019	0.00632	0.0708	0.0296	0.0242	0.129	0.153	<0.0500	0.00151	0.00206	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00138	<0.00100	<0.00100	<0.00500	0.0126	<0.0100	0.00566	<0.00100	<0.00100	0.0358	0.0106
	12/13/2019	0.00877	0.0654	0.0271	0.0233	0.121	0.144	<0.0500	0.00118	0.00171	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00112	<0.00100	<0.00100	<0.00500	0.0112	<0.0100	0.00470	<0.00100	<0.00100	0.0315	0.00944
	12/19/2019	0.0131	0.0861	0.0385	0.0318	0.170	0.202	0.0125 J	0.00187	0.00257	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.00173	<0.000285	<0.000174	<0.000481	0.0170	<0.00200	0.00747	<0.000228	<0.000162	0.0469	0.0144
	12/26/2019	0.0167	0.112	0.0514	0.0459	0.210	0.256	<0.0500	0.00211	0.00320	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00183	<0.00100	<0.00100	<0.00500	0.0235	<0.0100	0.00934	<0.00100	<0.00100	0.0672	0.0168
	1/2/2020	0.0116	0.0644	0.0551	0.0805	0.232	0.313	<0.0500	0.00231	0.00164	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00127	<0.00100	<0.00100	<0.00500	0.0107	0.0120	0.00544	<0.00100	0.00243	0.0377	0.0106
	1/15/2020	0.00860	0.0528	0.0318	0.0219	0.119	0.141	<0.0500	<0.00100	0.00259	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	0.0148	<0.0100	0.0104	<0.00100	<0.00100	0.0547	0.0172
	1/23/2020	0.00757	0.0462	0.0318	0.0224	0.119	0.141	<0.0500	0.00233	0.00295	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00180	<0.00100	<0.00100	<0.00500	0.0158	<0.0100	0.0166	<0.00100	<0.00100	0.103	0.0300
	1/31/2020	0.0101	0.0567	0.0462	0.0385	0.166	0.205	<0.500	<0.0100	<0.0100	0.0438	<0.0100	NA	0.0343	0.0344	<0.0100	<0.0100	<0.00100	0.0584	0.0262	<0.100	0.0458	<0.0100	<0.0100	0.323	0.0847
	2/6/2020	0.00758	0.0489	0.0306	0.0242	0.116	0.140	<0.0500	0.00234	0.00299	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00165	<0.00100	<0.00100	<0.00500	0.0174	<0.0100	0.0237	<0.00100	<0.00100	0.285	0.0451
	2/13/2020	0.00949	0.0498	0.0397	0.0337	0.145	0.179	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00251	<0.00100	<0.00100	<0.00500	0.0251	<0.0100	0.0450	<0.00100	<0.00100	0.349	0.0898
	2/20/2020	0.00846	0.0326	0.0313	0.0248	0.113	0.138	<0.0500	<0.00100	0.00407	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00229	<0.00100	<0.00100	<0.00500	0.0208	<0.0100	0.0431	<0.00100	<0.00100	0.322	0.0918
	2/28/2020	0.00895	0.0351	0.0374	0.0251	0.124	0.149	<0.250	<0.00500	<0.00500	<0.00500	<0.00500	NA	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0250	0.0249	<0.0500	0.0488	<0.00500	<0.00500	0.358	0.0989
	3/6/2020	0.00830	0.0313	0.0346	0.0228	0.114	0.137	<0.0500	0.00374	0.00467	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00254	<0.00100	<0.00100	<0.00500	0.0231	<0.0100	0.0472	<0.00100	<0.00100	0.378	0.0948
	3/13/2020	0.00781	0.0302	0.0330	0.0203	0.109	0.129	<0.0500	0.00153	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00247	<0.00100	<0.00100	<0.00500	0.0224	<0.0100	0.0428	<0.00100	<0.00100	0.277	0.0875
	3/18/2020	0.00746	0.0279	0.0304	0.0174	0.0981	0.116	<0.0500	0.00311	0.00400	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00224	<0.00100	<0.00100	<0.00500	0.0199	<0.0100	0.0365	<0.00100	<0.00100	0.275	0.0777
	3/27/2020	0.00641	0.0151	0.0247	0.0132	0.0737	0.0869	<0.0500	0.00122	0.00345	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00189	<0.00100	<0.00100	<0.00500	0.0166	<0.0100	0.0336	<0.00100	<0.00100	0.261	0.0721
	4/3/2020	0.00625	0.0129	0.0250	0.0130	0.0745	0.0875	<0.0500	0.00120	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00209	<0.00100	<0.00100	<0.00500	0.0174	<0.0100	0.0363	<0.00100	<0.00100	0.273	0.0756
	4/10/2020	0.00689	0.0327	0.0277	0.0159	0.0924	0.108	<0.0500	0.00253	0.00338	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00188	<0.00100	<0.00100	<0.00500	0.0171	<0.0100	0.0300	<0.00100	<0.00100	0.264	0.0580
	4/17/2020	0.00610	0.0258	0.0253	0.0141	0.0814	0.0955	<0.0500	0.00238	0.00321	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00175	<0.00100	<0.00100	<0.00500	0.0164	<0.0100	0.0280	<0.00100	<0.00100	0.220	0.0562
	4/24/2020	0.00550	0.0241	0.0225	0.0125	0.0756	0.0881	<0.0500	<0.00100	0.00297	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00179	<0.00100	<0.00100	<0.00500	0.0148	<0.0100	0.0251	<0.00100	<0.00100	0.199	0.0526
	5/1/2020	0.00606	0.0277	0.0237	0.0129	0.0773	0.0902	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00159	<0.00100	<0.00100	<0.00500	0.0143	<0.0100	0.0242	<0.00100	<0.0100	0.185	0.0513
	5/7/2020	0.00524	0.0168	0.0211	0.0108	0.0655	0.0763	<0.0500	<0.00100	0.00306	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00171	<0.00100	<0.00100	<0.00500	0.0138	<0.0100	0.0270	<0.00100	<0.0100	0.202	0.0582
	5/14/2020	0.00660	0.0357	0.0268	0.0141	0.0882	0.102	<0.0500	0.00236	0.00324	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00191	<0.00100	<0.00100	<0.00500	0.0165	<0.0100	0.0236	<0.00100	<0.00100	0.201	0.0453
	5/22/2020	0.00480	0.00851	0.0193	0.00896	0.0567	0.0657	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00194	<0.00100	<0.00100	<0.00500	0.0137	<0.0100	0.0276	<0.00100	<0.00100	0.187	0.0597
	5/26/2020	0.00490	0.0169	0.0210	0.0109	0.0637	0.0746	<0.0500	0.00122	0.00300	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00164	<0.00100	<0.00100	<0.00500	0.0138	<0.0100	0.0256	<0.00100	<0.00100	0.192	0.0532
	6/5/2020	0.00585	0.0317	0.0228	0.0117	0.0744	0.0861	<0.0500	0.00183	0.00271	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00155	<0.00100	<0.00100	<0.00500	0.0134	<0.0100	0.0182	<0.00100	<0.00100	0.129	0.0367
	6/12/2020	0.00600	0.0299	0.0231	0.0122	0.0757	0.0879	<0.0500	<0.00100	0.00283	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00154	<0.00100	<0.00100	<0.00500	0.0135	<0.0100	0.0211	<0.00100	<0.00100	0.150	0.0429
	6/18/2020	0.00648	0.0374	0.0236	0.0129	0.0818	0.0947	<0.0500	<0.00100	0.00256	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00145	<0.00100	<0.00100	<0.00500	0.0130	<0.0100	0.0162	<0.00100	<0.00100	0.121	0.0336
	6/23/2020	0.00599	0.0311	0.0232	0.0116	0.0771	0.0887	<0.0500	0.00103	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00153	<0.00100	<0.00100	<0.00500	0.0137	<0.0100	0.0193	<0.00100	<0.00100	0.135	0.0385
	6/30/2020	0.00720	0.0450	0.0276	0.0138	0.0923	0.106	<0.0500	0.00105	0.00306	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00176	<0.00100	<0.00100	<0.00500	0.0152	<0.0100	0.0169	<0.00100	<0.00100	0.119	0.0339
	7/6/2020	0.00529	0.0272	0.0203	0.0103	0.0700	0.0803	<0.0500	<0.00100	0.00253	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00136	<0.00100	<0.00100	<0.00500	0.0118	<0.0100	0.0156	<0.00100	<0.00100	0.118	0.0328
	7/16/2020	0.00536	0.0316	0.0204	0.0103	0.0684	0.0787	<0.0500	0.00148	0.00252	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00133	<0.00100	<0.00100	<0.00500	0.0117	<0.0100	0.0142	<0.00100	<0.00100	0.0944	0.0273
	7/23/2020	0.00452	0.0268	0.0174	0.00895	0.0602	0.0692	<0.0500	<0.00100	0.00199	<0.00100															



TABLE 1 - GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY

Permian EOR - Levey Well
Hobbs, New Mexico

Well ID	Date	VOCs (mg/l)																								
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloroethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	cis-1,2-Dichloroethylene	1,1-Dichloropropane	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.1	NE	NE	NE	NE	0.005	NE	NE	NE	0.03	NE	0.01	0.1	NE	NE
Levey Well (cont)	1/6/2021	0.00661	0.0494	0.0239	0.0141	0.0930	0.107	<0.0500	<0.00100	0.00233	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00140	<0.00100	<0.00100	<0.00500	0.0122	<0.0100	0.00710	<0.00100	<0.00100	0.0334	0.0113
	1/12/2021	0.00362	0.0206	0.0168	0.00849	0.0547	0.0632	<0.0500	0.00159	0.00278	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00157	<0.00100	<0.00100	<0.00500	0.0105	<0.0100	0.00959	<0.00100	<0.00100	0.0540	0.0174
	1/20/2021	0.00621	0.0383	0.0245	0.0137	0.0684	0.102	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00159	<0.00100	<0.00100	<0.00500	0.0135	<0.0100	0.00920	<0.00100	<0.00100	0.0470	0.0152
	1/25/2021	0.0102	0.0717	0.0337	0.0195	0.130	0.150	<0.0500	0.00167	0.00287	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00162	<0.00100	<0.00100	<0.00500	0.0162	<0.0100	0.00914	<0.00100	<0.00100	0.0455	0.0149
	1/25/2021	0.00689	0.0353	0.0243	0.0113	0.0733	0.0846	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00145	<0.00100	<0.00100	<0.00500	0.0127	<0.0100	0.0115	<0.00100	<0.00100	0.0687	0.0205
	1/25/2021	0.00693	0.0342	0.0251	0.0113	0.0737	0.0850	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00146	<0.00100	<0.00100	<0.00500	0.0133	<0.0100	0.0124	<0.00100	<0.00100	0.0738	0.0218
	1/27/2021	0.00186	0.00398	0.0101	0.00322	0.0219	0.0251	<0.0500	0.00110	0.00169	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	0.00618	<0.0100	0.0125	<0.00100	<0.00100	0.0743	0.0224
	2/3/2021	0.00208	0.00551	0.0120	0.00438	0.0262	0.0306	<0.0500	<0.00100	0.00195	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00101	<0.00100	<0.00100	<0.00500	0.00756	<0.0100	0.0156	<0.00100	<0.00100	0.0945	0.0282
	2/10/2021	0.00743	0.0531	0.0280	0.0157	0.104	0.120	<0.0500	0.00140	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00145	<0.00100	<0.00100	<0.00500	0.0142	<0.0100	0.00876	<0.00100	<0.00100	0.0448	0.0143
	2/24/2021	0.00800	0.0593	0.0287	0.0177	0.109	0.127	<0.0500	<0.00100	0.0024	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00142	<0.00100	<0.00100	<0.00500	0.0140	<0.0100	0.00808	<0.00100	<0.00100	0.0408	0.0132
	3/4/2021	0.00566	0.0446	0.0222	0.0133	0.0869	0.100	<0.0500	<0.00100	0.00187	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00110	<0.00100	<0.00100	<0.00500	0.0105	<0.0100	0.00694	<0.00100	<0.00100	0.0390	0.0119
	3/10/2021	0.00850	0.0668	0.0314	0.0194	0.126	0.145	<0.0500	<0.00100	0.00270	<0.00100	<0.00100	NA	<0.00100	<0.00100	0.00176	<0.00100	<0.00100	<0.00500	0.0156	<0.0100	0.00898	<0.00100	<0.00100	0.0466	0.0150
	3/17/2021	0.00789	0.0563	0.0273	0.0168	0.103	0.120	0.0253 J	0.000640 J	0.00239	<0.000195	<0.00100	NA	<0.000214	<0.000183	0.00139	<0.000285	<0.000174	<0.000481	0.0129	<0.00200	0.00830	<0.000228	<0.000162	0.0427	0.0135
	3/25/2021	0.00785	0.0585	0.0276	0.0175	0.109	0.127	0.0206 J	0.00129	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.00100	0.00143	<0.00100	<0.00100	<0.00500	0.0141	<0.0100	0.00779	<0.00100	<0.00100	0.0416	<0.00100
	3/31/2021	0.00661	0.0459	0.0243	0.0143	0.0857	0.100	<0.00270	<0.000286	<0.000199	<0.000195	<0.00100	<0.0100	0.00302	<0.000183	0.00144	<0.000244	<0.000174	<0.000481	0.0129	<0.00200	0.00840	<0.000228	<0.000162	0.0422	0.01370
	4/8/2021	0.00231	0.00502	0.0106	0.00358	0.0227	0.0263	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.00100	0.00103	<0.00100	<0.00100	<0.00500	0.00689	<0.0100	0.0148	<0.00100	<0.00100	0.0951	0.0639
	4/15/2021	0.00238	0.00491	0.0109	0.00364	0.0266	0.0302	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	<0.0100	<0.00100	<0.00100	0.00109	<0.00100	<0.00100	<0.00500	0.00733	<0.0100	0.0162	<0.00100	<0.00100	0.111	<0.00100
	4/21/2021	0.00214	0.00431	0.00957	0.00340	0.0198	0.0232	<0.00270	<0.000286	0.00181	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00103	<0.000285	<0.000174	<0.000481	0.00658	<0.00200	0.0149	<0.000228	<0.000623	0.109	0.0631
	4/28/2021	0.00688	0.0652	0.0325	0.0201	0.121	0.141	0.0198 J	<0.000286	0.00259	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00163	<0.000285	<0.000174	<0.000481	0.0161	<0.00200	0.00855	<0.000228	<0.000623	0.0431	0.0138
	5/5/2021	0.00808	0.0527	0.0257	0.0160	0.0935	0.110	<0.00270	0.00135	0.00232	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00130	<0.000285	<0.000174	<0.000481	0.0121	<0.00200	0.00760	<0.000228	<0.000623	0.0414	<0.000279
	5/13/2021	0.00176	0.00332	0.00899	0.00297	0.0187	0.0217	<0.00270	0.00109	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000802 J	<0.000285	<0.000174	<0.000481	0.00592	<0.00200	0.0139	<0.000228	<0.000623	0.0828	0.0239
	5/19/2021	0.00760	0.0603	0.0296	0.0182	0.112	0.130	0.0188 J	<0.000286	0.00254	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00157	<0.000285	<0.000174	<0.000481	0.0146	<0.00200	0.00825	<0.000228	<0.000623	0.0403	0.0128
	5/27/2021	0.00536	0.0360	0.0206	0.0117	0.0657	0.0774	0.0139 J	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00139	<0.000285	<0.000174	<0.000481	0.0111	<0.00200	0.00924	<0.000228	<0.000623	0.0483	0.0150
	6/2/2021	0.00701	0.0521	0.0258	0.0154	0.0906	0.106	<0.00270	<0.000286	0.00254	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00160	<0.000285	<0.000174	<0.000481	0.0130	<0.00200	0.00800	<0.000228	<0.000623	0.0388	0.0128
	6/10/2021	0.00162	0.00304	0.00713	0.00221	0.0146	0.0168	<0.00270	<0.000286	<0.000199	<0.000195	0.000195	0.00126	<0.000214	<0.000183	0.000716 J	<0.000285	<0.000174	<0.000481	0.00516	<0.00200	0.0109	<0.000228	<0.000623	0.0656	0.0195
	6/16/2021	0.00163	0.00240	0.00673	0.00204	0.0138	0.0158	<0.00270	<0.000286	0.00127	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000757 J	<0.000285	<0.000174	<0.000481	0.00461	<0.00200	0.0115	<0.000228	<0.000623	0.0728	0.0210
	6/22/2021	0.00184	0.00219	0.00736	0.00186	0.0156	0.0175	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000682 J	<0.000285	<0.000174	<0.000481	0.00499	<0.00200	0.0111	<0.000228	<0.000623	0.0714	0.0208
	6/30/2021	0.00163	0.00169	0.00698	0.00145	0.0143	0.0158	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000643 J	<0.000285	<0.000174	<0.000481	0.00484	<0.00200	0.0128	<0.000228	<0.000623	0.0855	0.0247
	7/1/2021								Levey Well Now Running Full Time																	
	7/7/2021	0.00456	0.0252	0.0175	0.00765	0.0555	0.0632	0.00587 J	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00117	<0.000285	<0.000174	<0.000481	0.00928	<0.00200	0.0119	<0.000228	<0.000623	0.0785	0.0224
	7/14/2021	0.00568	0.0325	0.0228	0.00991	0.0739	0.0838	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00162	<0.000285	<0.000174	<0.000481	0.0124	<0.00200	0.0146	<0.000228	<0.000623	0.0959	0.0287
	7/20/2021	0.00574	0.0332																							

TABLE 1 - GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY

Permian EOR - Levey Well
Hobbs, New Mexico

Well ID	Date	VOCs (mg/l)																								
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloroethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	cis-1,2-Dichloroethylene	1,1-Dichloropropane	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.1	NE	NE	NE	NE	0.005	NE	NE	NE	0.03	NE	0.01	0.1	NE	NE
MW-1	5/26/2020	0.000500 J	<0.000500	<0.000146	<0.000192	0.00215 J	0.00215	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.00101	0.0005 J
	6/30/2020	0.00275	<0.00100	<0.00100	<0.00100	0.0136	0.0136	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.0100	<0.00100	<0.00100	<0.00100	0.00665	0.00271
	8/20/2020	0.00222	<0.00100	<0.00100	<0.00100	<0.0100	<0.0100	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100	<0.0100	<0.00100	<0.00100	<0.00100	0.00388	0.00175
	10/23/2020	0.00353	<0.000367	<0.000657	<0.000642	0.00246 J	0.00246										NA									
	11/24/2020	0.00241	<0.000500	0.000310 J	<0.000192	0.00133 J	0.001330	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.00151	0.000820 J
	12/18/2020	0.00257	<0.000500	0.000580 J	<0.000192	0.00145 J	0.00145	<0.00270	<0.000286	0.000350 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000270 J	<0.000285	<0.000174	<0.000481	0.000320 J	<0.00200	0.000230 J	<0.000228	<0.000162	0.00234	0.00111
	12/23/2020	0.00159	<0.000500	0.000380 J	<0.000192	0.000970 J	0.000970 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	0.000230 J	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.000720 J	0.000360 J
	12/30/2020	0.00194	<0.000500	0.000470 J	<0.000192	0.00148 J	0.00148	<0.00270	<0.000286	0.000230 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000240 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00154	0.000750 J
	1/6/2021	0.00209	<0.000500	0.000330 J	<0.000192	0.00122 J	0.00122	<0.00270	<0.000286	0.000310 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000260 J	<0.000285	<0.000174	<0.000481	0.000190 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00219	0.00103
	1/12/2021	0.00211	0.000690 J	0.000540 J	<0.000192	0.00163 J	0.00163	<0.00270	<0.000286	0.000220 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000200 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00143	0.000670 J
	1/20/2021	0.00222	<0.000500	0.000430 J	<0.000192	0.00137 J	0.00137	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000210 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00140	0.000720 J
	1/27/2021	0.00157	<0.000500	0.000400 J	<0.000192	0.00123 J	0.00123	0.00398 J	<0.000286	0.000270 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000210 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00153	0.000830 J
	2/3/2021	0.00203	<0.000500	0.000430 J	<0.000192	0.00100 J	0.00100 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000190 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00105	0.000510 J
	2/10/2021	0.00196	<0.000500	0.000560 J	<0.000192	0.00143 J	0.00143	<0.00575	<0.000286	0.000240 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000300 J	<0.00200	<0.000179	<0.000228	<0.000162	0.00143	0.000740 J
	2/24/2021	0.00158	<0.000500	0.000460 J	<0.000192	0.00110 J	0.0011	<0.00575	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000210 J	<0.00200	<0.000179	<0.000228	<0.000162	0.000930 J	0.000490 J
	3/4/2021	0.00139	<0.000500	0.00102	<0.000192	0.00211 J	0.00211	<0.00575	<0.000286	0.000240 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000440 J	<0.00200	0.000240 J	<0.000228	<0.000162	0.00131	0.000680 J
	3/10/2021	0.00143	<0.000500	0.000490 J	<0.000192	0.000900 J	0.000900 J	<0.00575	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000200 J	<0.00200	<0.000179	<0.000228	<0.000162	0.000780 J	0.000370 J
	3/17/2021	0.00159	0.00112	0.000790 J	<0.000192	0.00183 J	0.00183	<0.00575	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000380 J	<0.00200	0.000230 J	<0.000228	<0.000162	0.00145	0.000570 J
	3/25/2021	0.00159	<0.00100	0.000533 J	<0.00100	0.00123 J	0.00123 J	<0.0500	<0.00100	0.000214 J	<0.00100	<0.00100	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	0.000253 J	<0.0100	<0.00100	<0.00100	<0.00100	0.00152	<0.00100
	3/31/2021	0.00161	<0.000500	0.000333 J	<0.000192	0.000714 J	0.000714 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.0100	<0.0100	<0.00100	<0.000233	<0.000285	<0.000174	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.000980 J	0.000392 J
	4/8/2021	0.00128	<0.000500	0.000463 J	<0.000192	0.000985 J	0.000985 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000214 J	<0.00200	0.000271 J	<0.000228	<0.000162	0.00171	<0.000279
	4/15/2021	0.00124	<0.000500	0.000366 J	<0.000192	0.00140 J	0.00140 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000162	0.00185	<0.000279
	4/21/2021	0.00114	<0.000500	0.00114	<0.000192	0.00148 J	0.00148 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000421 J	<0.00200	0.000338 J	<0.000228	<0.000623	0.00187	0.000711 J
	4/28/2021	0.00126	<0.000500	0.00116	<0.000192	0.00220 J	0.00220 J	<0.00270	<0.000286	0.000203 J	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000593 J	<0.00200	0.000274 J	<0.000228	<0.000623	0.00150	0.000483 J
	5/5/2021	0.00149	<0.000500	0.000834 J	<0.000192	0.00124 J	0.00124 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	0.00134	0.000333 J
	5/13/2021	0.00122	<0.000500	<0.000515	<0.000192	0.000619 J	0.000619 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	<0.000161	<0.00200	<0.000179	<0.000228	<0.000623	0.00159	<0.000279
	5/19/2021	0.00138	0.000545 J	0.00126	<0.000192	0.00269 J	0.00269 J	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	<0.000233	<0.000285	<0.000174	<0.000481	0.000613 J	<0.00200	0.000281 J	<0.000228	<0.000623	0.00191	0.000594 J
	5/27/2021	0.00138	<0.000500	0.00102	<0.000192	0.00209 J	0.00209 J	<0.00270	<0.000286	0.000251 J	<0.0001															

TABLE 1 - GROUNDWATER SAMPLING (VOCs) ANALYTICAL DATA SUMMARY

Permian EOR - Levey Well
Hobbs, New Mexico

Well ID	Date	VOCs (mg/l)																								
		Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes	Total Xylenes	Methyl ethyl ketone (2-Butanone)	n-Butylbenzene	Sec-Butylbenzene	tert-Butylbenzene	Chloroform	Chloroethane	2-Chlorotoluene	4-Chlorotoluene	p-Cymene (p-Isopropyltoluene)	1,2-Dichloroethane	cis-1,2-Dichloroethylene	1,1-Dichloropropane	Isopropylbenzene	Naphthalene	n-Propylbenzene	1,1,2-Trichloroethane	Styrene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		0.005	1	0.7	NE	NE	0.62	NE	NE	NE	NE	0.1	NE	NE	NE	NE	0.005	NE	NE	NE	0.03	NE	0.01	0.1	NE	NE
MW-2	5/26/2020	0.00901	0.0299	0.0069	0.0186	0.0545	0.0731	<0.00270	<0.000286	0.000270 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000660	<0.000285	<0.000174	<0.000481	0.00223	<0.00200	0.000570 J	<0.000228	<0.000162	0.0125	0.00704
	6/30/2020	0.0124	0.0193	0.0187	0.0196	0.0903	0.110	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	0.00667	<0.0100	0.00243	<0.00100	<0.00100	0.0231	0.00815
	8/20/2020	0.0148	0.0172	0.0182	0.0160	0.0802	0.0962	<0.0500	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	0.00640	<0.0100	0.00170	<0.00100	<0.00100	0.0145	0.00421
	10/23/2020	0.0250	0.00730	0.0248	0.0186	0.110	0.129	NA																		
	11/24/2020	0.0358	0.0613	0.0503	0.0465	0.221	0.2675	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.00143	<0.000285	<0.000174	<0.000481	0.0189	0.00242 J	<0.000179	<0.000228	<0.000162	0.0590	0.0149
	12/18/2020	0.0263	0.0260	0.0369	0.0240	0.165	0.189	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.00113	<0.000285	<0.000174	<0.000481	0.0148	<0.00200	0.00486	<0.000228	<0.000162	0.0467	0.0121
	12/23/2020	0.0299	0.0358	0.0381	0.0266	0.156	0.183	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.00101	<0.000285	<0.000174	<0.000481	0.0135	<0.00200	0.00408	<0.000228	<0.000162	0.0406	0.0102
	12/30/2020	0.0200	0.0242	0.0185	0.0146	0.0592	0.0738	<0.00270	0.000550 J	0.000680 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000540 J	<0.000285	<0.000174	<0.000481	0.00603	<0.00200	0.00170	<0.000228	<0.000162	0.0116	0.00533
	1/6/2021	0.0200	0.0169	0.0231	0.0169	0.118	0.135	<0.00270	0.000390 J	0.00117	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.00105	0.000500 J	<0.000174	<0.000481	0.00815	<0.00200	0.00267	0.000800 J	<0.000228	0.0339	0.0103
	1/12/2021	0.0193	0.0185	0.0198	0.0144	0.0922	0.107	<0.00270	0.000690 J	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000710 J	<0.000285	<0.000174	<0.000481	0.00756	<0.00200	0.00242	<0.000228	<0.000162	0.0259	0.00698
	1/20/2021	0.0229	0.0169	0.0190	0.0136	0.0829	0.0965	0.00394 J	0.000400 J	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000470 J	<0.000285	<0.000174	<0.000481	0.00640	<0.00200	0.00177	<0.000228	<0.000162	0.0202	0.00517
	1/27/2021	0.0298	0.0276	0.0282	0.0269	0.155	0.182	0.00504 J	0.00103	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.00116	<0.000285	<0.000174	<0.000481	0.0117	<0.00200	0.00343	<0.000228	<0.000162	0.0500	0.0129
	2/3/2021	0.0286	0.0392	0.0258	0.0236	0.111	0.135	<0.00270	<0.000286	0.000850 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000590 J	<0.000285	<0.000174	<0.000481	0.00817	<0.00200	0.00240	<0.000228	<0.000162	0.0267	0.00674
	2/10/2021	0.0307	0.0201	0.0329	0.0210	0.159	0.180	<0.00575	0.000870 J	<0.000199	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000940 J	<0.000285	<0.000174	<0.000481	0.0120	<0.00200	0.00331	<0.000228	<0.000162	0.0407	0.00994
	2/24/2021	0.0218	0.0122	0.0164	0.0111	0.0749	0.086	<0.00575	0.000370 J	0.000640 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000480 J	<0.000285	<0.000174	<0.000481	0.0060	<0.00200	0.00175	<0.000228	<0.000162	0.0191	0.00496
	3/4/2021	0.0264	0.0232	0.0320	0.0212	0.142	0.163	<0.00575	0.000430 J	0.00131	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000930 J	<0.000285	<0.000174	<0.000481	0.0115	<0.00200	0.00390	<0.000228	<0.000162	0.0403	0.0100
	3/10/2021	0.0269	0.0234	0.0271	0.0206	0.117	0.138	<0.00575	<0.000286	0.000970 J	<0.000195	<0.000259	NA	<0.000214	<0.000183	0.000720 J	<0.000285	<0.000174	<0.000481	0.00931	<0.00200	0.00281	<0.000228	<0.000162	0.0287	0.00720
	3/17/2021	0.0238	0.0237	0.0257	0.0190	0.113	0.132	<0.0500	<0.00100	0.00113	<0.00100	<0.000259	NA	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500	<0.00500	0.00923	<0.0100	0.00305	<0.00100	<0.00100	0.0315	0.00821
	3/25/2021	0.0209	0.0281	0.0202	0.0165	0.0892	0.106	<0.0500	<0.00100	0.000799 J	0.00134	<0.00100	<0.0100	<0.00100	<0.00100	0.000610 J	<0.00100	<0.00100	<0.00500	0.00725	<0.0100	0.00229	<0.00100	<0.00100	0.0224	<0.00100
	3/31/2021	0.0298	0.0107	0.0177	0.0203	0.124	0.144	<0.00270	<0.000286	0.00137	<0.000195	<0.00100	<0.0100	0.00151	<0.000183	0.00109	<0.000285	<0.000174	<0.000481	0.0133	<0.00200	0.00295	<0.000228	0.000631 J	0.0426	0.0107
	4/8/2021	0.0226	0.0217	0.0210	0.0175	0.0990	0.117	<0.00270	0.000640 J	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000579 J	<0.000285	<0.000174	<0.000481	0.00799	<0.00200	0.00235	<0.000228	<0.000162	0.0237	<0.000279
	4/15/2021	0.0260	0.0132	0.0236	0.0176	0.129	0.147	<0.00270	<0.000286	<0.000199	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000925 J	<0.000285	<0.000174	<0.000481	0.0102	<0.00200	0.00320	<0.000228	<0.000162	0.0381	0.00968
	4/21/2021	0.0220	0.00991	0.0180	0.0162	0.118	0.134	<0.00270	0.000776 J	0.00121	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000901 J	<0.000285	<0.000174	<0.000481	0.0106	<0.00200	0.00267	<0.000228	<0.000623	0.0364	<0.000279
	4/28/2021	0.0320	0.0265	0.0408	0.0297	0.187	0.217	<0.00270	0.00121	0.00159	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00127	<0.000285	<0.000174	<0.000481	0.0159	<0.00200	0.00438	<0.000228	<0.000623	0.0496	0.0126
	5/5/2021	0.0234	0.0123	0.0180	0.0147	0.115	0.130	<0.00270	0.000841 J	0.00124	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000766 J	<0.000285	<0.000174	<0.000481	0.00959	<0.00200	0.00274	<0.000228	<0.000623	0.0391	<0.000279
	5/13/2021	0.0273	0.00926	0.0180	0.0165	0.115	0.132	<0.00270	<0.000286	0.00123	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000996 J	<0.000285	<0.000174	<0.000481	0.0112	<0.00200	0.00303	<0.000228	<0.000623	0.0396	0.00983
	5/19/2021	0.0246	0.0111	0.0276	0.0160	0.127	0.143	<0.00270	0.000834 J	0.00115	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.000937 J	<0.000285	<0.000174	<0.000481	0.0106	<0.00200	0.00354	<0.000228	<0.000623	0.0374	0.00933
	5/27/2021	0.0346	0.0127	0.0287	0.0166	0.139	0.156	<0.00270	<0.000286	0.00145	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00116	<0.000285	<0.000174	<0.000481	0.0111	<0.00200	0.00399	<0.000228	<0.000623	0.0453	0.0114
	6/2/2021	0.0257	0.00773	0.0277	0.0139	0.149	0.163	<0.00270	0.000614 J	0.00150	<0.000195	0.00495	0.00444 J	<0.000214	<0.000183	0.00122	<0.000285	<0.000174	<0.000481	0.00559	0.0128	<0.00200	0.00408	<0.000228	0.0455	0.0117
	6/10/2021	0.0288	0.00860	0.0318	0.0153	0.165	0.180	<0.00270	<0.000286	0.00160	<0.000195	<0.000259	<0.000318	<0.000214	<0.000183	0.00129	<0.000285	<0.000174	<0.000481	0.0137	<0.00200	0.00445</				

TABLE 2 - GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY

Permian EOR - Levey Well
Hobbs, New Mexico

Well ID	Date	(mg/l)													%	SU
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO ₃)	Alkalinity, Carbonate (as CaCO ₃)		
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9
Levey Well	12/6/2019	<0.500	253	<0.500	0.594	0.199	61.5	405	65.0	5.27	83.7	1,680	1,260	<4.00	2.70	6.45
	12/13/2019	<0.500	315	<0.500	0.744	0.222	72.9	450	80.1	6.71	110	1,900	1,230	<4.00	2.00	7.02
	12/19/2019	0.414 J	311	0.381 J	0.539	<0.0293	62.9	411	72.2	5.61	101	1,640	1,140	<4.00	0.200	6.57
	12/26/2019	<0.500	257	<0.500	0.617	0.204	61.7	418	68.8	5.82	88.5	1,760	1,280	<4.00	1.30	6.44
	1/2/2020	<0.500	302	<0.500	0.331	<0.100	60.6	375	70.5	5.96	98.8	1,630	1,150	<4.00	2.40	6.83
	1/15/2020	<0.500	190	0.559	0.129	0.930	53.5	401	66.8	4.82	82.9	1,570	1,260	<4.00	0	6.35
	1/23/2020	<0.500	195	0.617	0.126	0.128	46.2	426	76.3	8.84	86.4	1,530	1,230	<4.00	1.60	6.21
	1/31/2020	<0.500	197	0.616	0.129	<0.100	48.5	446	79.1	7.43	89.5	1,440	1,230	<4.00	3.20	6.15
	2/6/2020	<0.500	316	<0.500	0.179	<0.100	64.2	430	76.0	7.60	101	1,100	1,180	<4.00	1.10	6.07
	2/13/2020	<2.50	293	0.623	0.178	<0.500	57.3	409	74.5	6.80	95.7	1,640	1,200	<4.00	0.300	6.04
	2/20/2020	<0.500	272	0.586	0.157	<0.100	49.6	421	71.4	6.38	91.4	1,690	1,220	<4.00	0.300	5.93
	2/28/2020	<0.500	307	<0.500	1.05	1.35	56.6	438	74.0	5.98	97.4	1,620	1,230	<4.00	0.400	6.12
	3/6/2020	<0.500	284	0.621	0.107	1.27	56.2	418	67.9	5.60	92.7	1,880	1,230	<4.00	0.800	6.26
	3/13/2020	<0.500	316	0.629	<0.100	<0.100	59.3	393	63.3	5.32	91.2	1,770	1,200	<4.00	4.30	6.23
	3/18/2020	0.533	332	0.642	0.128	<0.100	63.5	391	67.4	5.56	95.7	1,680	1,180	<4.00	3.80	6.44
	3/27/2020	0.533	324	0.728	<0.100	<0.100	57.6	418	70.3	5.91	105	1,610	1,180	<4.00	0.200	6.57
	4/3/2020	<0.500	304	0.807	0.110	<0.100	57.3	417	69.0	5.91	101	1,960	1,180	<4.00	0.200	6.37
	4/10/2020	0.575	351	0.612	0.172	<0.100	61.8	431	72.3	6.17	104	1,930	1,190	<4.00	0.600	6.73
	4/17/2020	0.590	353	0.691	0.165	<0.100	59.7	406	73.2	5.40	108	1,750	1,180	<4.00	1.70	6.51
	4/24/2020	0.595	370	0.723	0.152	<0.100	61.2	408	75.2	5.55	113	1,810	1,130	<4.00	0.600	6.32
	5/1/2020	0.576	376	0.686	0.140	<0.100	61.8	402	74.6	5.39	106	1,750	1,130	<4.00	1.90	6.37
	5/7/2020	0.517	365	0.675	0.163	<0.100	58.8	425	70.5	5.57	108	1,640	1,140	<4.00	0.00	6.55
	5/14/2020	0.571	409	0.585	0.160	<0.100	56.0	412	76.5	6.23	107	1,900	1,200	<4.00	3.70	6.34
	5/22/2020	0.531	319	0.561	1.550	<0.100	30.1	354	63.7	5.24	97.4	1,360	1,190	<4.00	6.10	6.54
	5/26/2020	0.549	357	0.688	0.153	<0.100	44.5	356	69.6	5.67	102	1,650	1,170	<4.00	6.30	6.42
	6/3/2020	0.640	417	0.535	0.139	<0.100	39.9	379	73.3	5.92	108	1,670	1,160	<4.00	5.90	6.30
	6/12/2020	0.602	359	0.697	0.145	<0.100	43.9	386	72.4	6.70	106	1,670	1,140	<4.00	2.40	6.22
	6/18/2020	0.576	431	<5.00	0.144	<0.100	39.5	418	78.8	6.23	115	1,800	1,180	<4.00	2.40	6.28
	6/23/2020	0.586	398	<5.00	0.136	<0.100	33.3	361	66.3	5.48	98.2	1,920	1,190	<4.00	8.40	6.23
	6/30/2020	0.695	431	<5.00	0.149	<0.100	37.9	437	78.6	6.70	113	1,830	1,170	<4.00	2.60	6.39
	7/9/2020	0.647	413	<5.00	0.147	0.215	40.5	421	78.5	6.58	114	1,790	1,170	<4.00	1.50	6.37
	7/16/2020	0.657	390	<5.00	0.128	<0.100	40.6	402	77.6	7.01	114	1,890	1,170	<4.00	1.90	6.34
	7/23/2020	0.621	396	<5.00	0.175	0.169	36.5	419	74.0	6.58	111	2,000	1,160	<4.00	1.10	6.22
	7/30/2020	0.669	390	0.625	0.181	<0.100	39.3	397	71.4	5.59	103	1,910	1,170	<4.00	3.70	6.18
	8/7/2020	0.631	387	0.526	0.186	1.75	36.1	404	79.5	6.73	111	1,810	1,150	<4.00	0.900	6.12
	8/13/2020	0.713	408	0.505	0.191	1.45	34.9	368	75.1	6.54	115	1,980	1,150	<4.00	5.00	6.26
	8/20/2020	0.690	449	<0.500	0.164	<0.100	38.7	389	69.0	5.99	113	2,000	1,090	<4.00	4.40	6.18
	8/27/2020	0.846	582	<0.500	0.158	1.68	49.4	446	82.6	7.17	161	2,570	973	<4.00	1.50	6.35
	9/2/2020	0.868	635	<0.500	0.159	<0.100	48.1	422	77.9	7.25	168	1,620	1,030	<4.00	3.40	6.30
	9/10/2020	0.714	499	<0.500	<0.100	1.61	41.9	387	79.4	6.53	133	1,980	1,090	<4.00	4.20	6.10
	9/17/2020	0.769	472	<0.500	0.272	1.06	40.8	467	73.4	6.45	119	1,930	1,110	<4.00	1.10	6.14
	9/25/2020	0.779	541	<0.500	0.150	<0.100	44.0	386	75.9	5.86	133	1,680	1,110	<4.00	6.70	6.17
	10/1/2020	0.721	466	<0.500	0.173	<0.100	41.4	398	75.5	6.25	124	1,940	1,110	<4.00	3.30	6.07
	10/9/2020	0.786	527	<0.500	0.161	<0.100	43.8	426	79.8	6.90	139	2,220	1,090	<4.00	1.90	6.21
	10/16/2020	0.595	460	0.511	<0.100	<2.00	45.7	376	72.5	5.90	122	2,020	1,080	<4.00	4.80	6.20
	11/24/2020	0.817	572	<0.500	0.124	2.07	37.5	438	79.6	6.56	141	2,200	1,100	<4.00	2.60	6.45
	12/4/2020	0.687	706	<0.500	0.142	3.27	30.9	405	75.8	7.09	143	2,000	1,050	<4.00	9.30	6.33
	12/11/2020	0.816	487	0.949	0.197	1.80	33.4	445	82.0	6.90	133	1,990	1,160	<4.00	0.200	6.20
	12/18/2020	0.763	497	<5.00	0.129	1.87	37.6	424	79.5	6.97	137	1,910	1,180	<4.00	2.70	6.39
	12/23/2020	0.613	477	<5.00	0.108	<0.100	38.3	416	78.2	7.82	129	1,800	1,290	<4.00	5.70	6.22
	12/30/2020	0.712	493	<0.500	<0.100	<0.100	40.1	448	80.0	6.21	139	2,120	1,340	<4.00	4.40	6.14

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 Permian EOR - Levey Well
 Hobbs, New Mexico

Well ID	Date	(mg/l)													%	SU
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO ₃)	Alkalinity, Carbonate (as CaCO ₃)		
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 (Cont.)	1/6/2021	0.784	504	<0.500	0.155	2.61	23.0	400	79.8	6.14	135	2,210	1,340	<4.00	8.10	6.27
	1/12/2021	0.605	326	<0.500	0.137	1.05	<0.500	324	64.3	5.68	97.8	1,680	1,160	<4.00	7.00	6.57
	1/20/2021	0.796	486	<0.500	0.138	<0.100	7.68	397	73.0	6.00	127	2,170	1,200	<4.00	5.70	6.24
	1/27/2021	0.510	264	0.905	0.137	1.16	23.1	296	55.1	4.75	83.1	1,350	875	<4.00	1.70	6.38
	2/3/2021	0.501	275	0.842	0.122	1.02	20.5	329	59.0	4.76	89.4	1,370	940	<4.00	0.00	6.37
	2/10/2021	0.615	561	<0.500	0.147	0.308	24.9	416	77.9	7.03	156	1,980	1,170	<4.00	4.50	6.31
	2/24/2021	0.695	576	<0.500	0.163	2.6	31.4	450	81.3	7.94	164	2,260	1,190	<4.00	2.50	6.22
	3/4/2021	0.789	585	<0.500	0.121	0.215	54.1	425	77.8	6.41	151	2,090	1,050	<4.00	3.00	6.34
	3/10/2021	0.756	540	<0.500	0.147	<0.100	45.5	417	76.3	5.54	139	1,940	1,160	<4.00	5.10	6.29
	3/17/2021	0.813	519	1.21	0.169	<0.100	33.8	436	71.3	6.10	127	1,910	1,200	<4.00	4.70	5.97
	3/25/2021	<10.0	529	<10.0	<2.00	1.99 J	20.2	435	78.0	7.14	136	2,320	1,250	<4.00	-10.80	6.6
	3/31/2021	0.785	499	0.358 J	0.130	<0.0293	16.5	416	74.3	6.73	132	1,650	1,150	<4.00	-9.18	6.4
	4/8/2021	<0.500	254	0.869	<0.100	0.121	23.3	271	46.7	5.00	74.5	1,120	785	<4.00	-9.60	6.5
	4/15/2021	0.545	253	0.939	<0.100	<0.100	34.1	283	53.5	4.66	82.8	998	793	<4.00	-7.22	6.5
	4/21/2021	0.460 J	253	0.729	0.125	<0.0293	9.23	278	52.4	4.83	81.4	1,210	869	<4.00	-10.1	6.4
	4/28/2021	0.841	497	0.196 J	0.133	<0.0293	21.2	416	75.8	6.88	133	2,000	1,290	<4.00	-12.5	6.3
	5/5/2021	0.780	475	0.362 J	0.151	<0.0293	13.6	428	80.1	7.43	123	2,120	1,230	<4.00	-9.6	6.2
	5/13/2021	0.469 J	239	1.01	0.126	0.756 J	28.5	238	46.1	4.10	72.6	1,150	737	<4.00	-11.9	6.7
	5/19/2021	0.725	566	0.324 J	<0.0391	2.93	21.0	494	91.6	8.14	164	2,160	1,260	<4.00	-5.71	6.3
	5/27/2021	0.579	419	0.499 J	0.137	0.136	16.7	406	73.3	6.47	123	1,370	810	<4.00	1.85	6.5
	6/2/2021	0.712	488	0.303 J	0.128	<0.0293	23.7	447	82.8	7.43	139	2,140	1,120	<4.00	-4.83	6.3
	6/10/2021	0.415 J	247	1.10	0.124	1.38	22.2	273	54.9	4.90	84.8	1,270	669	<4.00	-2.53	6.5
	6/16/2021	0.405 J	227	0.946	0.125	<0.0293	11.5	267	56.0	4.64	84.4	1,500	723	<4.00	-3.70	6.7
	6/22/2021	0.405 J	230	1.00	0.117	1.67	28.9	298	53.1	4.74	80.7	1,230	657	<4.00	0.795	6.7
	6/30/2021	0.398 J	237	1.07	0.140	0.205	23.8	258	51.9	4.32	74.6	1,200	676	<4.00	-5.560	6.9
	7/1/2021	Levey Well Now Running Full Time														
	7/7/2021	0.469 J	305	0.705	0.128	<0.0293	41.3	337	67.2	5.46	96.3	1,780	764	<4.00	-0.751	6.6
	7/14/2021	0.446 J	297	0.753	0.151	0.167	41.6	323	61.9	4.56	87.0	1,200	785	<4.00	-3.73	6.4
	7/20/2021	0.180 J	290	0.223 J	0.0457 J	<0.0293	38.2	317	65.9	5.31	96.1	1,620	854	<4.00	-5.11	6.4
	7/27/2021	0.437 J	281	0.491 J	0.126	1.42	41.3	338	66.9	5.14	95.9	1,240	790	<4.00	-0.522	6.2
	8/5/2021	0.400 J	275	0.565	0.158	<0.0293	43.3	334	68.8	5.00	90.9	1,610	714	<4.00	2.12	6.6
	8/11/2021	0.446 J	261	0.512	0.154	1.81	43.2	298	64.8	4.96	89.8	1,470	764	<4.00	-3.46	6.4
	8/19/2021	0.583	380	0.357 J	0.177	0.694	39.1	336	68.2	6.69	111	2,030	769	<4.00	-3.85	6.6
	8/25/2021	0.483 J	249	0.680	0.125	1.13	41.4	305	59.6	4.65	83.9	1,050	698	<4.00	-0.532	6.6
	9/2/2021	0.418 J	233	0.688	0.110	0.147	20.1	287	52.2	3.98	75.2	1,140	588	<4.00	2.27	7.0
	9/8/2021	0.357 J	257	0.442 J	0.0997 J	1.20	43.4	300	61.8	4.83	87.3	1,360	703	<4.00	-1.15	6.6
	9/14/2021	0.372 J	250	0.511	0.118	1.11	42.3	285	58.7	4.81	81.7	988	730	<4.00	-4.44	6.4
	9/21/2021	0.546	227	0.951	0.224	<0.0293	37.4	313	68.2	5.30	97.5	1,080	610	<4.00	7.72	6.6
	9/29/2021	0.535	248	0.542	0.186	0.164	41.9	302	59.9	4.60	85.4	1,410	765	<4.00	-2.94	6.6
	10/7/2021	0.454 J	235	0.582	1.10	<0.0293	40.5	323	65.5	4.79	88.3	1,310	765	<4.00	0.449	6.6
	10/13/2021	0.459 J	238	0.608	0.198	1.10	40.9	252	52.7	3.97	75.6	1,030	765	<4.00	-10.6	6.7
	10/21/2021	0.470 J	227	0.557	0.143	<0.0293	36.9	238	51.0	3.54	72.5	1,250	722	<4.00	-10.2	6.5
	10/27/2021	0.444 J	238	0.469 J	0.193	0.0910 J	42.5	330	67.2	5.31	94.2	1,290	706	<4.00	3.95	6.7
	11/5/2021	0.367 J	231	1.45	0.220	<0.0293	41.7	328	63.6	5.06	90.7	1,050	657	<4.00	5.76	6.9
	11/11/2021	0.379 J	229	0.594	0.238	<0.0293	36.9	221	48.1	3.36	71.5	1,140	571	<4.00	-5.92	7.0
	11/18/2021	0.560	247	0.397 J	0.176	<0.0293	44.3	276	50.8	4.29	76.4	1,350	698	<4.00	-5.71	6.6
	11/24/2021	0.455 J	232	0.646	0.203	0.718	41.9	253	52.5	4.07	76.6	1,240	546	<4.00	-0.200	6.6
	12/1/2021	0.497 J	233	0.652	0.144	<0.0293	42.0	284	55.9	4.31	82.4	1,040	644	<4.00	-0.133	6.9
	12/8/2021	0.516	230	0.620	0.187	<0.0293	42.5	261	55.8	4.20	82.9	1,200	633	<4.00	-1.56	6.5
	12/16/2021	0.490 J	228	0.528	0.251	<0.0293	42.1	282	55.3	4.13	81.9	1,280	649	<4.00	-0.883	6.4
	12/22/2021	0.480 J	230	0.294 J	0.223	<0.0293	43.3	304	58.5	4.66	85.8	1,270	619	<4.00	3.67	6.4
	12/29/2021	0.476 J	225	0.588	0.224	<0.0293	43.8	300	57.5	4.69	84.9	1,220	657	<4.00	1.62	6.6

TABLE 2 - GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY

Permian EOR - Levey Well
Hobbs, New Mexico

Well ID	Date	(mg/l)														%	SU		
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Cation-Anion Balance	pH			
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9			
MW-1	5/26/2020	NA	363	0.913	0.998	1.03	283	NA											7.21
	6/30/2020	0.591	342	<0.500	0.145	<0.100	88.8	401	84.7	6.41	191	1,890	1,290	<4.00	NA	6.75			
	8/20/2020	0.634	339	<0.500	<0.100	<0.100	68.3	401	90.3	5.38	147	1,760	1,210	<4.00	NA	6.30			
	10/23/2020	NA	353	NA															
	11/24/2020	0.629	345	0.309 J	0.161	2.00	73.2	412	82.8	5.61	124	1,630	1,200	<4.00	0.400	6.45			
	12/18/2020	NA	375	NA				414	79.7	5.41	117	1,380	1,160	<4.00	1.30	6.58			
	12/23/2020	0.627	339	0.316 J	0.117	<0.0293	73.2	408	82.5	6.58	119	1,600	1,130	<4.00	2.10	6.56			
	12/30/2020	NA	347	NA														6.37	
	1/6/2021	NA	325	NA														6.51	
	1/12/2021	NA	359						NA					1,160	<4.00	NA	6.42		
	1/20/2021	NA	353						NA					1,160	<4.00	NA	6.34		
	1/27/2021	NA	334						NA					1,010	<4.00	NA	6.44		
	2/3/2021	NA	368						NA					1,130	<4.00	NA	6.38		
	2/10/2021	NA	339						NA					1,160	<4.00	NA	6.45		
	2/24/2021	NA	343						NA					1,070	<4.00	NA	6.45		
	3/4/2021	NA	339						NA					1,070	<4.00	NA	6.38		
	3/10/2021	NA	324						NA					1,020	<4.00	NA	6.34		
	3/17/2021	NA	330						NA					1,020	<4.00	NA	6.16		
	3/25/2021	NA	312	0.367 J	0.129	<0.100	77.5	NA					980	<4.00	NA	6.9			
	3/31/2021	NA	309	0.387 J	0.175	<0.0293	81.3	NA					977	<4.00	NA	6.7			
	4/8/2021	NA	290	0.515	0.0994 J	<0.0293	58.1	NA					933	<4.00	NA	6.5			
	4/15/2021	NA	272	0.583	0.107	<0.0293	54.0	NA					833	<4.00	NA	6.6			
	4/21/2021	NA	299	0.369 J	0.135	<0.0293	52.7	NA					927	<4.00	NA	6.5			
	4/28/2021	NA	315	0.315 J	0.119	<0.0293	57.8	NA					994	<4.00	NA	6.5			
	5/5/2021	NA	317	0.358 J	0.135	<0.0293	68.5	NA					1,020	<4.00	NA	6.5			
	5/13/2021	NA	270	0.492 J	0.125	0.729 J	55.6	NA					819	<4.00	NA	6.8			
	5/19/2021	NA	324	0.335 J	<0.0391	2.58	65.0	NA					1,070	<4.00	NA	6.5			
	5/27/2021	NA	325	0.380 J	0.128	0.148	70.3	NA					971	<4.00	NA	6.3			
	6/2/2021	NA	315	0.305 J	0.146	<0.0293	72.8	NA					979	<4.00	NA	6.5			
	6/10/2021	NA	295	0.561	0.130	1.44	64.7	NA					768	<4.00	NA	6.6			
	6/16/2021	NA	320	0.478 J	0.127	0.243	59.1	NA					811	<4.00	NA	6.7			
	6/22/2021	NA	311	0.478 J	0.119	1.65	56.9	NA					790	<4.00	NA	6.8			
	6/30/2021	NA	308	0.561	0.145	0.168	64.2	NA					813	<4.00	NA	6.7			
	7/1/2021		Levey Well Now Running Full Time																
	7/7/2021	NA	325	0.547	0.127	<0.0293	75.9	NA					761	<4.00	NA	6.8			
	7/14/2021	NA	360	0.418 J	0.134	0.0880 J	112	NA					931	<4.00	NA	6.8			
	7/20/2021	NA	324	0.138 J	0.0457 J	<0.0293	81.5	NA					750	<4.00	NA	6.7			
	7/27/2021	NA	352	0.340 J	0.148	1.22	82.8	NA					786	<4.00	NA	6.7			
	8/5/2021	NA	336	0.426 J	0.117	<0.0293	79.0	NA					695	<4.00	NA	6.9			
	8/11/2021	NA	326	0.342 J	0.153	1.48	85.5	NA					735	<4.00	NA	6.6			
	8/19/2021	NA	334	0.227 J	0.149	1.36	81.9	NA					810	<4.00	NA	6.8			
	8/25/2021	NA	328	0.395 J	0.132	0.947 J	76.5	NA					809	<4.00	NA	6.8			
	9/2/2021	NA	325	0.311 J	0.105	<0.0293	74.7	NA					755	<4.00	NA	6.8			
	9/8/2021	NA	272	0.442 J	0.103	0.782 J	64.5	NA					584	<4.00	NA	6.9			
	9/14/2021	NA	332	0.276 J	0.103	0.776 J	98.4	NA					660	<4.00	NA	7.0			
	9/21/2021	NA	203	0.896	0.186	<0.0293	32.4	NA					419	<4.00	NA	6.9			
	9/29/2021	NA	232	0.659	0.168	0.0819 J	40.1	NA					505	<4.00	NA	6.9			
	10/7/2021	NA	253	0.626	0.186	<0.0293	58.2	NA					567	<4.00	NA	6.9			
	10/13/2021	NA	268	0.659	0.178	<0.0293	62.9	NA					564	<4.00	NA	8.1			
	10/21/2021	NA	293	0.409 J	0.144	<0.0293	81.1	NA					591	<4.00	NA	7.1			
	11/5/2021	NA	282	0.631	0.191	<0.0293	77.1	NA					571	<4.00	NA	7.0			
	11/11/2021	NA	311	0.309 J	0.258	<0.0293	89.9	NA					536	<4.00	NA	7.1			
	11/18/2021	NA	172	0.741	0.151	<0.0293	23.1	NA					314	<4.00	NA	7.4			
	11/24/2021	NA	267	0.429 J	0.220	0.549	81.4	NA					502	<4.00	NA	6.8			
	12/1/2021	NA	222	0.596	0.141	<0.0293	61.0	NA					390	<4.00	NA	7.3			
	12/8/2021	NA	226	0.358 J	0.162	<0.0293	66.0	NA					484	<4.00	NA	6.9			
	12/16/2021	NA	174	0.504	0.143	<0.0293	49.9	NA					398	<4.00	NA	6.9			
	12/22/2021	NA	163	0.517	0.240	<0.0293	40.2	NA					312	<4.00	NA	7.1			
	12/29/2021	NA	142	0.591	0.205	0.295	42.2	NA					302	<4.00	NA	7.3			

TABLE 2 - GROUNDWATER SAMPLING (General Water Chemistry) ANALYTICAL DATA SUMMARY

 Permian EOR - Levey Well
 Hobbs, New Mexico

Well ID	Date	(mg/l)														%	SU		
		Bromide	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Calcium	Magnesium	Potassium	Sodium	Total Dissolved Solids	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Carbonate (as CaCO3)	Cation-Anion Balance	pH			
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	250.0	1.6	10.0	1.0	NE	NE	NE	NE	NE	1,000.0	NE	NE	NE	6-9			
MW-2	5/26/2020	NA	106	0.341 J	1.920	0.639	120	NA											6.32
	6/30/2020	0.535	115	<0.500	1.13	0.656	111	478	59.6	6.66	102	1,320	1,320	<4.00	NA	6.36			
	8/20/2020	0.603	150	<0.500	1.10	0.439	122	559	73.5	7.46	102	1,700	1,350	<4.00	NA	6.01			
	10/23/2020	NA	107	NA															
	11/24/2020	0.565	180	0.172 J	1.08	0.557	136	841	85.5	12.8	116	1,670	1,450	<4.00	15.4	6.30			
	12/18/2020	NA	153	NA				494	64.9	6.63	98.0	1,410	1,380	<4.00	3.20	6.29			
	12/23/2020	0.621	165	0.179 J	1.11	0.639	126	472	65.7	5.96	101	1,810	1,430	<4.00	0.300	6.27			
	12/30/2020	NA	153	NA													6.15		
	1/6/2021	NA	124	NA													6.24		
	1/12/2021	NA	141	NA								1,350	<4.00	NA	6.20				
	1/20/2021	NA	133	NA								1,360	<4.00	NA	6.12				
	1/27/2021	NA	140	NA								1,360	<4.00	NA	6.24				
	2/3/2021	NA	178	NA								1,390	<4.00	NA	6.17				
	2/10/2021	NA	133	NA								1,380	<4.00	NA	6.19				
	2/24/2021	NA	146	NA								1,370	<4.00	NA	6.17				
	3/4/2021	NA	166	NA								1,380	<4.00	NA	6.07				
	3/10/2021	NA	175	NA								1,390	<4.00	NA	6.14				
	3/17/2021	NA	163	NA								1,400	<4.00	NA	5.87				
	3/25/2021	NA	161	0.183 J	0.835	0.425	119	NA				1,420	<4.00	NA	6.5				
	3/31/2021	NA	102	0.299 J	0.714	1.13	99.9	NA				1,330	<4.00	NA	6.4				
	4/8/2021	NA	157	0.223 J	0.784	0.549	122	NA				1,430	<4.00	NA	6.2				
	4/15/2021	NA	136	0.255 J	0.711	0.683	115	NA				1,380	<4.00	NA	6.1				
	4/21/2021	NA	114	0.157 J	0.650	0.856	101	NA				1,340	<4.00	NA	6.1				
	4/28/2021	NA	155	0.178 J	0.692	0.511	118	NA				1,380	<4.00	NA	6.2				
	5/5/2021	NA	122	0.198 J	0.704	0.609	105	NA				1,350	<4.00	NA	6.3				
	5/13/2021	NA	104	0.199 J	0.686	1.02	98.3	NA				1,320	<4.00	NA	6.3				
	5/19/2021	NA	142	0.171 J	0.633	0.435	120	NA				1,370	<4.00	NA	6.2				
	5/27/2021	NA	147	0.206 J	0.689	0.889	120	NA				1,260	<4.00	NA	6.5				
	6/2/2021	NA	119	0.168 J	0.647	0.549	103	NA				1,250	<4.00	NA	6.2				
	6/10/2021	NA	151	0.252 J	0.714	2.77	123	NA				1,260	<4.00	NA	6.1				
	6/16/2021	NA	118	0.205 J	0.613	1.36	104	NA				1,208	<4.00	NA	6.5				
	6/22/2021	NA	122	0.171 J	0.593	0.969	105	NA				1,260	<4.00	NA	6.5				
	6/30/2021	NA	111	0.417 J	0.633	1.37	102	NA				1,230	<4.00	NA	6.4				
	7/1/2021	Levey Well Now Running Full Time																	
	7/7/2021	NA	110	0.257 J	0.543	0.713	98.2	NA				1,120	<4.00	NA	6.4				
	7/14/2021	NA	187	0.233 J	0.752	0.797	124	NA				1,350	<4.00	NA	6.4				
	7/20/2021	NA	123	0.132 J	0.460	0.659	107	NA				1,280	<4.00	NA	6.3				
	7/27/2021	NA	113	0.134 J	0.607	0.516 J	100	NA				1,250	<4.00	NA	6.4				
	8/5/2021	NA	120	0.189 J	0.660	0.552	103	NA				1,200	<4.00	NA	6.5				
	8/11/2021	NA	115	0.181 J	0.624	3.02	101	NA				1,300	<4.00	NA	6.3				
	8/19/2021	NA	122	0.104 J	0.630	1.73	104	NA				1,290	<4.00	NA	6.4				
	8/25/2021	NA	122	0.191 J	0.639	0.603	103	NA				1,270	<4.00	NA	6.5				
	9/2/2021	NA	110	<0.100	0.536	0.595	98.1	NA				1,320	<4.00	NA	6.4				
	9/8/2021	NA	105	<0.100	0.540	0.590	97.3	NA				1,280	<4.00	NA	6.4				
	9/14/2021	NA	124	<0.100	0.542	0.386	107	NA				1,270	<4.00	NA	6.4				
	9/21/2021	NA	90.5	0.426 J	0.638	1.04	89.1	NA				1,250	<4.00	NA	6.3				
	9/29/2021	NA	133	0.245 J	0.631	0.982	117	NA				1,300	<4.00	NA	6.4				
	10/7/2021	NA	108	0.201 J	0.581	0.564	96.6	NA				1,280	<4.00	NA	6.4				
	10/13/2021	NA	178	0.140 J	0.734	0.507	131	NA				1,320	<4.00	NA	6.5				
	10/21/2021	NA	102	0.133 J	0.635	0.787	93.3	NA				1,270	<4.00	NA	6.5				
	11/5/2021	NA	141	0.363 J	<0.0391	0.454	108	NA				1,250	<4.00	NA	6.6				
	11/11/2021	NA	115	<0.100	0.677	0.374	97.6	NA				1,240	<4.00	NA	6.5				
	11/18/2021	NA	103	<0.100	0.600	1.28	98.1	NA				1,140	<4.00	NA	6.6				
	11/24/2021	NA	163	<0.500	0.680	0.539	127	NA				1,500	<4.00	NA	6.3				
	12/1/2021	NA	120	0.148 J	0.604	0.511	103	NA				1,240	<4.00	NA	6.9				
	12/8/2021	NA	188	<0.100	0.759	0.684	123	NA				1,250	<4.00	NA	6.3				
	12/16/2021	NA	134	<0.100	0.529	<0.0293	113	NA				1,180	<4.00	NA	6.3				
	12/22/2021	NA	163	<0.100	0.670	0.462	122	NA				1,280	<4.00	NA	6.4				
	12/29/2021	NA	210	<0.100	1.02	0.415	115	NA				1,280	<4.00	NA	6.3				

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									
Permian EOR - South Hobbs G/SA Unit Hobbs, New Mexico									
Well ID	Date	(mg/l)						°C	
		Sulfide	Carbon Dioxide (Free)	TPH GRO	TPH DRO	TPH MRO	Total TPH	Temperature	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	NE	NE	NE	NE	NE	NE	
MW-1	5/26/2020	<0.495	163	<0.943	1.48	<0.910	1.48	22.9	
	6/30/2020	<5.00	648	<2.34	<2.34	<2.34	<2.34	21.9	
	8/20/2020	<5.00	596	2.35	3.18	<2.26	5.53	23.7	
	11/24/2020	<0.495	756	<0.907	<0.838	<0.838	<0.8380	19.1	
	12/18/2020	<0.495	432	<0.909	<0.840	<0.840	<0.840	15.8	
	12/23/2020	<0.495	553	<0.895	1.81 J	<0.827	1.81 J	15.5	
	12/30/2020	<0.495	1,170	<0.917	<0.847	<0.847	<0.847	13.1	
	1/6/2021	<0.495	585	<0.897	<0.829	<0.829	<0.829	12.7	
	1/12/2021	<0.495	731	<0.891	<0.823	<0.823	<0.823	14.6	
	1/20/2021	0.600 J	667	<0.889	<0.821	<0.821	<0.821	17.6	
	1/27/2021	0.800 J	668	<0.909	<0.840	<0.840	<0.840	18.0	
	2/3/2021	<0.495	699	<0.907	<0.838	<0.838	<0.838	20.6	
	2/10/2021	1.20 J	423	1.66 J	<0.828	<0.828	1.66 J	14.1	
	2/24/2021	0.600 J	448	<0.884	<0.817	<0.817	<0.817	18.0	
	3/4/2021	<0.495	515	3.04	1.03 J	<0.846	4.07	18.8	
	3/10/2021	1.20 J	499	<0.878	<0.811	<0.811	<0.811	18.6	
	3/17/2021	<0.495	378	<0.886	<0.819	<0.819	<0.819	19.1	
	3/25/2021	<0.495	333	17.2	1.00 J	<0.867	18.2	20.2	
	3/31/2021	<0.495	526	<0.893	<0.825	<0.825	<0.825	18.4	
	4/8/2021	<0.495	364	2.57 J	1.55 J	<0.867	4.12 J	18.9	
	4/15/2021	<0.495	418	<0.887	<0.887	1.72 J	1.72 J	20.5	
	4/21/2021	<0.495	415	<0.898	2.05 J	<0.867	2.05 J	18.8	
	4/28/2021	<0.495	689	<0.890	1.19 J	<0.859	1.19 J	18.9	
	5/5/2021	<0.495	647	<0.890	<0.890	<0.859	<0.890	18.8	
	5/13/2021	<0.495	259	<0.893	<0.893	<0.862	<0.893	19.0	
	5/19/2021	<0.495	679	<0.893	<0.893	<0.862	<0.893	21.5	
	5/27/2021	<0.495	973	<0.923	<0.923	<0.891	<0.923	20.6	
	6/2/2021	<0.495	619	<0.918	<0.918	<0.886	<0.918	18.1	
	6/10/2021	<0.495	385	<0.915	<0.915	<0.883	<0.915	22.0	
	6/16/2021	<0.495	323	<0.926	<0.926	<0.894	<0.926	18.2	
	6/22/2021	<0.495	250	<0.938	<0.938	<0.905	<0.938	22.1	
	6/30/2021	<0.495	324	<0.923	<0.923	<0.891	<0.923	21.0	
	7/1/2021	Levey Well Now Running Full Time							
	7/7/2021	<0.495	241	<0.901	<0.901	<0.869	<0.901	18.4	
	7/14/2021	<0.495	295	<0.991	<0.957	<0.991	<0.991	19.0	
	7/20/2021	<0.495	321	<0.938	<0.938	<0.905	<0.938	19.8	
	7/27/2021	<0.495	321	<0.906	<0.906	<0.875	<0.906	22.0	
	8/5/2021	<0.495	196	<0.950	<0.950	<0.917	<0.950	21.9	
	8/11/2021	<0.495	369	<0.932	<0.932	<0.900	<0.932	19.9	
	8/19/2021	<0.495	457	<0.950	<0.950	<0.917	<0.950	20.8	
	8/25/2021	<0.495	477	<0.918	<0.918	<0.886	<0.918	20.0	
	9/2/2021	<0.495	416	<0.935	<0.935	<0.902	<0.935	20.6	
	9/8/2021	<0.495	280	<0.953	<0.953	<0.920	<0.953	21.4	
	9/14/2021	<0.495	289	<0.932	0.978 J	<0.900	0.978 J	19.3	
	9/21/2021	1.00 J	105	<0.918	<0.918	<0.886	<0.918	18.0	
	9/29/2021	<0.495	127	<0.998	<0.998	<0.963	<0.998	18.7	
	10/7/2021	<0.495	143	<0.923	<0.923	<0.891	<0.923	18.0	
	10/13/2021	<0.495	8.85	<0.950	<0.950	<0.917	<0.950	20.7	
	10/21/2021	<0.495	434	<0.918	<0.918	<0.886	<0.918	19.9	
	11/5/2021	<0.495	114	<1.03	<1.03	<0.993	<1.03	22.9	
	11/11/2021	<0.495	563	<0.923	<0.923	<0.891	<0.923	19.3	
	11/18/2021	<0.495	24.9	1.05 J	<0.969	<0.935	1.05 J	19.0	
	11/24/2021	<5.00	159	<4.70	<4.70	<4.70	<4.70	19.7	
	12/1/2021	<0.495	39.0	<0.935	<0.935	<0.902	<0.935	19.4	
	12/8/2021	<0.495	122	<0.929	<0.929	<0.897	<0.929	18.1	
	12/16/2021	<0.495	69.3	<0.962	<0.962	<0.929	<0.962	18.0	
	12/22/2021	<0.495	49.5	1.34 J	<0.941	<0.908	1.34 J	21.5	
	12/29/2021	<0.495	50.2	<0.935	<0.935	<0.902	<0.935	18.1	



TABLE 3 - GROUNDWATER SAMPLING (Additional Parameters) ANALYTICAL DATA SUMMARY
Permian EOR - South Hobbs G/SA Unit
Hobbs, New Mexico

Well ID	Date	(mg/l)						°C
		Sulfide	Carbon Dioxide (Free)	TPH GRO	TPH DRO	TPH MRO	Total TPH	
20 NMAC 6.2 Water Quality - Ground and Surface Water Protection Human Health Standards		NE	NE	NE	NE	NE	NE	NE
MW-2	5/26/2020	<0.495	923	2.10	1.07 J	<0.900	6.16	23.1
	6/30/2020	<5.00	1,290	<2.32	<2.32	<2.32	<2.32	22.1
	8/20/2020	<5.00	1,150	2.75	3.29	<2.26	6.02	23.0
	11/24/2020	<0.495	1,300	1.73 J	2.17 J	<0.835	3.900	19.1
	12/18/2020	0.600 J	958	1.34 J	0.915 J	<0.824	2.26 J	15.1
	12/23/2020	<0.495	1,090	1.61 J	1.12 J	<0.837	2.73	15.6
	12/30/2020	<0.495	1,090	<0.893	<0.825	<0.825	<0.825	12.1
	1/6/2021	<0.495	1,240	1.99 J	<0.824	<0.824	1.99 J	13.1
	1/12/2021	11.2	1,450	1.64 J	<0.833	<0.833	1.64 J	13.9
	1/20/2021	9.60	1,390	<0.907	<0.838	<0.838	<0.838	18.2
	1/27/2021	15.0	1,600	1.31 J	<0.834	<0.834	1.31 J	13.4
	2/3/2021	<0.495	1,030	0.955 J	1.15 J	<0.813	2.11 J	20.9
	2/10/2021	<0.495	915	2.08	<0.746	<0.746	2.08	11.5
	2/24/2021	<0.495	793	1.01 J	<0.832	<0.832	1.01 J	19.4
	3/4/2021	<0.495	1,030	1.74 J	<0.819	<0.819	1.74 J	18.2
	3/10/2021	<0.495	1,010	<0.893	<0.825	<0.825	<0.825	18.5
	3/17/2021	<0.495	970	2.33	<0.835	<0.835	2.33	19.5
	3/25/2021	<0.495	653	1.50 J	1.16 J	<0.857	2.66 J	20.2
	3/31/2021	<0.495	1,110	<0.941	<0.941	<0.908	<0.941	18.3
	4/8/2021	<0.495	1,010	2.30 J	1.01 J	<0.875	3.31 J	18.9
	4/15/2021	<0.495	2,200	2.49 J	0.999 J	1.70 J	5.19	20.1
	4/21/2021	<0.495	1,230	1.01 J	0.913 J	<0.856	1.92 J	18.9
	4/28/2021	<0.495	1,100	2.54 J	1.19 J	<0.872	3.73 J	19.0
	5/5/2021	<0.495	1,350	2.09 J	<0.890	<0.859	2.09 J	18.8
	5/13/2021	<0.495	1,320	1.18 J	<0.906	<0.875	1.18 J	19.6
	5/19/2021	<0.495	1,730	1.46 J	<0.901	<0.869	1.46 J	19.8
	5/27/2021	<0.495	798	<0.920	<0.920	<0.888	<0.920	20.8
	6/2/2021	<0.495	1,580	2.01 J	<0.895	<0.864	2.01 J	18.1
	6/10/2021	<0.495	2,010	1.46 J	<0.882	<0.851	1.46 J	22.0
	6/16/2021	<0.495	810	0.963 J	<0.826	<0.797	0.963 J	18.0
	6/22/2021	<0.495	795	1.18 J	<0.947	<0.914	1.18 J	22.2
	6/30/2021	<0.495	975	1.21 J	<0.893	<0.862	1.21 J	20.3
	7/1/2021	Levey Well Now Running Full Time						
	7/7/2021	<0.495	889	1.62 J	<0.906	<0.875	1.62 J	18.3
	7/14/2021	<0.495	1,080	<0.965	<0.965	<0.932	<0.965	19.3
	7/20/2021	<0.495	1,170	1.16 J	<0.898	<0.867	1.16 J	19.8
	7/27/2021	<0.495	950	1.03 J	<0.906	<0.875	1.03 J	22.3
	8/5/2021	<0.495	778	<0.909	<0.909	<0.877	<0.909	22.1
	8/11/2021	<0.495	1,040	1.46 J	<0.887	<0.856	1.46 J	19.7
	8/19/2021	<0.495	2,010	1.93 J	<0.959	<0.926	1.93 J	20.7
	8/25/2021	<0.495	1,400	1.01 J	<0.932	<0.900	1.01 J	19.2
	9/2/2021	<0.495	1,830	3.03 J	2.11 J	<0.920	5.14	21.4
	9/8/2021	<0.495	1,570	1.70 J	<0.932	<0.900	1.70 J	20.5
	9/14/2021	<0.495	1,240	1.93 J	1.01 J	<0.917	2.94 J	19.4
	9/21/2021	<0.495	1,260	1.33 J	<0.941	<0.908	1.33 J	18.0
	9/29/2021	<0.495	1,040	1.60 J	<1.19	<1.15	1.60 J	18.5
	10/7/2021	<0.495	1,020	1.45 J	<0.988	<0.954	1.45 J	18.0
	10/13/2021	<0.495	834	1.56 J	<0.935	<0.902	1.56 J	20.6
	10/21/2021	<0.495	2,420	1.64 J	<0.918	<0.886	1.64 J	19.8
	11/5/2021	<0.495	628	1.39 J	<0.965	<0.932	1.39 J	22.8
	11/11/2021	<0.495	4,500	2.27 J	<0.985	<0.950	2.27 J	18.5
	11/18/2021	<0.495	574	2.56 J	<0.923	<0.891	2.56 J	19.5
	11/24/2021	<5.00	1,500	2.34 J	<4.59	<4.59	2.34 J	19.1
	12/1/2021	<0.495	313	1.69 J	<0.912	<0.880	1.69 J	19.2
	12/8/2021	<0.495	1,260	1.86 J	<0.932	<0.900	1.86 J	18.9
	12/16/2021	<0.495	957	1.15 J	<0.947	<0.914	1.15 J	18.0
	12/22/2021	<0.495	1,020	1.95 J	<0.944	<0.911	1.95 J	21.6
	12/29/2021	<0.495	1,250	1.15 J	<0.935	<0.902	1.15 J	18.0

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

Permian EOR - Levey Well
Hobbs, New Mexico

Well ID	Date	Time	(ug/m3)																																					
			Acetone	Benzene	Bromomethane	Carbon disulfide	Chloromethane	2-Chlorotoluene	Cyclohexane	1,2-Dichloroethane	cis-1,2-Dichloroethane	Ethanol	Ethylbenzene	4-Ethyltoluene	Trichlorofluoromethane	Dichlorodifluoromethane	Heptane	n-Hexane	Isopropyl benzene	Methylene Chloride	Methyl Butyl Ketone	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Methyl methacrylate	Naphthalene	2-Propanol	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	1,1,1-Trichloroethane	Trichloroethylene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylene	o-Xylene	TPH (GC/MS) Low Fraction		
Levey Well	1/25/2021	0823	229	<6.39	<7.76	9.52	<4.13	<10.3	575	<8.10	<7.93	324	<8.67	<9.82	<11.2	<17.0	299	980	<9.83	<6.94	<51.1	<36.9	<51.2	<8.19	<33.0	<30.7	<8.51	<13.6	<5.90	<18.8	<10.9	22.2	<9.82	<9.82	<7.04	<17.3	<8.67	17,500		
	1/25/2021	1213	<2.97	<0.639	<0.776	<0.622	<0.413	<1.03	2.01	<0.810	<0.793	4.98	<0.867	<0.982	<1.12	<1.70	1.44	3.20	<0.983	<0.694	<5.11	<3.69	<5.12	<0.819	<33.0	<3.07	<0.851	<1.36	<0.590	<1.88	<1.09	<1.36	1.14	1.29	<0.704	<1.73	<0.867	<826		
	1/28/2021	1316	14,800	<0.639	2.96	246	22.5	42.5	1,770	<0.810	<0.793	2,410	53.8	298	<1.12	2.03	1,220	2,890	150	<0.694	101	2,340	53.2	<0.819	<33.0	438	<0.851	72.6	<0.590	95.7	<1.09	<1.07	445	375	<0.704	246	147	61,100		
	2/10/2021	1300	1,140	<12.8	<15.5	181	<8.26	<20.6	10,800	<16.2	<15.9	<23.8	44.2	426	<22.5	<19.8	4,040	14,000	92.4	<13.9	<102	79.0	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	66.3	<21.8	<21.4	334	584	<14.1	361	218	315,000		
	2/24/2021	1045	<2.97	<0.639	<0.776	161	<0.413	<1.03	4,510	<0.810	9.83	<1.19	88.4	491	<1.12	<0.989	2,200	5,610	249	<0.694	<5.11	<3.69	<5.12	<0.819	<33.0	<3.07	<0.851	5.47	<0.590	101	<1.09	1.14	218	305	<0.704	633	388	114,000		
	3/4/2021	1402	375	<3.19	<3.88	67.9	<2.07	<5.15	2,620	<4.05	<3.96	88.6	56.4	<4.91	<5.62	<4.95	847	4,690	176	<3.47	<25.6	72.0	<25.6	<4.09	22.8	<15.4	<4.25	<6.79	<2.95	49.3	<5.44	<5.36	1,460	913	<3.52	533	198	83,400		
	3/10/2021	1050	<2.97	<0.639	<0.776	71.0	<0.413	<1.03	3,300	<0.810	<0.793	<1.19	61.1	1,070	1.26	<0.989	990	4,120	205	<0.694	<5.11	54.8	<5.12	<0.819	<33.0	<3.07	<0.851	<1.36	<0.590	55.4	<1.09	<1.07	947	825	<0.704	516	249	120,000		
	3/17/2021	1135	806	<0.639	<0.776	95.6	<0.413	<1.03	3,160	<0.810	<0.793	50.2	63.3	444	1.38	<0.989	1,240	4,550	128	<0.694	<5.11	139	<5.12	<0.819	<33.0	46.5	<0.851	<1.36	<0.590	101	<1.09	<1.07	332	313	<0.704	432	179	88,800		
	3/25/2021	1111	<2.97	<0.639	<0.776	<0.622	<0.413	<1.03	11,700	<0.810	<0.793	41.3	65.9	<0.982	<1.12	<0.989	2,500	12,800	157	<0.694	<5.11	<3.69	<5.12	<0.819	<33.0	<3.07	<0.851	<1.36	<0.590	67.4	<1.09	<1.07	424	359	<0.704	382	205	256,000		
	3/31/2021	1055	1,880	<0.639	<0.776	<0.622	<0.413	<1.03	22,300	<0.810	<0.793	96.3	78.0	185	<1.12	<0.982	4,420	24,000	150	<0.694	<5.11	244	<5.12	<0.819	<33.0	<3.07	<0.851	17.5	<0.590	73.1	9.57	<1.07	292	265	<0.704	352	193	305,000		
	4/8/2021	1205	2,350	843	<31.1	<24.9	<165	<412	30,500	<324	<317	2,830	<347	736	<450	<396	<327	64,500	<393	<278	<2,040	<1,470	<2,050	<328	<1,320	1,470	<340	<543	<236	<753	<435	<429	453	420	<282	737	<347	574,000		
	4/15/2021	1228	1,200	<12.8	<15.5	97.7	<8.26	<20.6	41,000	<16.2	<15.9	98.0	91.9	447	<22.5	<19.8	4,950	98,000	134	<13.9	<102	206	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	101	<21.8	<21.4	197	198	<14.1	620	190	438,000		
	4/21/2021	1340	639	<0.639	<0.776	<0.622	<0.413	<1.03	2,390	<0.810	<0.793	234	72.4	309	<1.12	<0.989	969	5,710	166	<0.694	<5.11	280	<5.12	<0.819	<33.0	127	<0.851	<1.36	<0.590	48.2	<1.09	<1.07	216	447	<0.704	296	225	<826		
	4/28/2021	1215	1,210	<12.8	<15.5	134	<8.26	<20.6	6,650	<16.2	<15.9	343	129	1,540	<22.5	<19.8	<16.4	13,200	264	<13.9	<102	229	<102	<16.4	<66.0	143	<17.0	<27.2	<11.8	95.3	<21.8	<21.4	1,050	761	<14.1	954	313	261,000		
	5/5/2021	1235	371	<12.5	<15.5	12.6	<8.26	<20.6	844	<16.2	<15.9	326	27.2	88.3	<22.5	<19.8	326	1,120	58.0	<13.9	<102	93.8	<102	<16.4	<66.0	<61.5	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	179	142	<14.1	185	65.0	273,000		
	5/13/2021	1320	1,220	<12.8	<15.5	39.8	<8.26	<20.6	6,130	<16.2	<15.9	456	88.4	545	<22.5	<19.8	2,300	7,300	228	<13.9	<102	226	<102	<16.4	<66.0	219	<17.0	<27.2	<11.8	62.5	<21.8	<21.4	1,230	756	<14.1	668	251	205,000		
	5/19/2021	1445	1,700	<12.8	<15.5	<1.24	<0.826	<2.06	6,680	<1.62	<1.59	226	76.7	306	<2.25	<1.98	2,010	12,300	179	<1.39	122	200	<10.2	<1.64	<66.0	205	<1.70	<2.72	<1.18	50.5	<2.18	3.46	520	550	<1.41	577	195	175,000		
	5/27/2021	1245	380	0.664	<0.776	<0.622	1.57	<1.03	1.14	<0.810	<0.793	6,130	3.68	7.07	1.51	2.64	9.98	157	<0.983	13.5	13.5	115	263	<0.819	<33.0	976	301	<1.36	149	86.3	<1.09	<1.07	15.4	437	<0.704	121	3.70	17,900		
	6/2/2021	1220	1,280	<12.8	<15.5	<12.4	<8.26	<20.6	5,480	<16.2	<15.9	317	78.5	241	<22.5	<19.8	1,500	6,840	162	<13.9	<102	188	<102	<16.4	<66.0	125	<17.0	<27.2	<11.8	47.1	<21.8	<21.4	555	356	<14.1	542	174	179,000		
	6/10/2021	1150	3,470	<12.8	<15.5	106	<8.26	<20.6	2,260	<16.2	<15.9	722	21.6	169	<22.5	<19.8	507	3,020	48.1	<13.9	<102	295	<102	<16.4	<66.0	234	<17.0	<27.2	<11.8	<37.7	<21.8	<21.4	89.3	73.1	<14.1	127	49.4	95,800		
	6/16/2021	1217	2,160	<0.639	<0.776	43.0	<8.26	<1.03	806	<0.810	<0.793	609	17.9	145	<1.12	<0.989	308	1,670	32.2	<0.694	35.6	251	<5.12	<0.819	<33.0	201	<0.851	<1.36	<0.590	29.3	<1.09	<1.07	85.9	58.0	<0.704	88.9	34.4	32,400		
	6/22/2021	1240	1,190	<6.39	<7.76	<6.22	<4.13	<10.3	2,440	<8.10	<7.93	347	9.49	78.0	<11.2	<0.89	<8.18	7,510	20.4	<6.94	<51.1	168	<51.2	<8.19	<33.0	<30.7	<8.51	<13.6	<5.90	<18.8	<10.9	<10.7	38.8	29.6	<7.04	52.2	21.9	58,200		
	6/30/2021	1130	3,870	<6.39	<7.76	41.1	<4.13	<10.3	2,590	<8.10	<7.93	1,230	17.9	78.5	<11.2	<0.89	1,120	6,450	<9.83	<6.94	<51.1	433	<51.2	<8.19	<33.0	<30.7	<8.51	20.3	<5.90	86.6	<10.9	<10.7	45.1	32.2	<7.04	78.0	35.1	123,000		
	7/1/2021	1200	Levey Well Now Running Full Time																																					
	7/27/2021	1332	<238	<51.1	<62.1	<49.8	<33.0	<82.5	334,000	<64.8	<63.4	<189	<69.4	107	<89.9	<79.1	405,000	3,160,000	<78.7	<55.6	<409	<295	<409	<65.5	<264	3,580	<68.1	<109	<47.2	<86.1	<87.0	<85.7	95.2	177	<56.3	258	147	11,800,000		
	8/5/2021	1443	<1,190	<256	<311	<249	<165	<412	348,000	3,740	<63.4	<943	<347	<393	<450	<396	474,000	2,890,000	<393	<278	<2,040	<1,470	<2,050	<328	<1,320	<1,230	<340	<543	<236	1,270	<435	<429	545	<393	<282	698	<347	8,300,000		
	8/11/2021	1325	<59.4	<12.8	<15.5																																			



APPENDIX C

Laboratory Data Sheets and Chain-of-Custody Documentation



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-8862-1

Laboratory Sample Delivery Group: Hobbs NM

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

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

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

Authorized for release by:
12/13/2021 3:49:10 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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

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

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

Laboratory Job ID: 880-8862-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-8862-1
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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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 Hobb NM - 03B1417001

Job ID: 880-8862-1
SDG: Hobbs NM

Job ID: 880-8862-1

Laboratory: Eurofins Xenco, Midland

Narrative	
	Job Narrative 880-8862-1

Receipt

The sample was received on 12/1/2021 3:25 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.2°C

GC/MS VOA

Method 8260C: The matrix spike recoveries for analytical batch 860-33371 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/LCSD) recovery was within acceptance limits.

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

HPLC/IC

Method 300_ORGFMS: The following sample was received outside of holding time: Levey Well (880-8862-1).

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

Metals

Method 200.7: The following sample was diluted to bring the concentration of target analytes within the calibration range: Levey Well (880-8862-1). 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.

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Client Sample Results

Client: Ensolum

Job ID: 880-8862-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-8862-1

Date Collected: 12/01/21 08:48

Matrix: Water

Date Received: 12/01/21 15:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00256		0.00100	0.000214	mg/L		12/08/21 16:43	1
Bromobenzene	<0.000300	U	0.00100	0.000300	mg/L		12/08/21 16:43	1
Bromochloromethane	<0.000209	U	0.00100	0.000209	mg/L		12/08/21 16:43	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231	mg/L		12/08/21 16:43	1
Bromoform	<0.000630	U	0.00500	0.000630	mg/L		12/08/21 16:43	1
Bromomethane	<0.00105	U	0.00500	0.00105	mg/L		12/08/21 16:43	1
2-Butanone	0.00324	J	0.0500	0.00270	mg/L		12/08/21 16:43	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L		12/08/21 16:43	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L		12/08/21 16:43	1
Chloroethane	<0.000433	U	0.0100	0.000433	mg/L		12/08/21 16:43	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L		12/08/21 16:43	1
Chloromethane	<0.000318	U	0.0100	0.000318	mg/L		12/08/21 16:43	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214	mg/L		12/08/21 16:43	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183	mg/L		12/08/21 16:43	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174	mg/L		12/08/21 16:43	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690	mg/L		12/08/21 16:43	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739	mg/L		12/08/21 16:43	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319	mg/L		12/08/21 16:43	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337	mg/L		12/08/21 16:43	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236	mg/L		12/08/21 16:43	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197	mg/L		12/08/21 16:43	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199	mg/L		12/08/21 16:43	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316	mg/L		12/08/21 16:43	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244	mg/L		12/08/21 16:43	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285	mg/L		12/08/21 16:43	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216	mg/L		12/08/21 16:43	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396	mg/L		12/08/21 16:43	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439	mg/L		12/08/21 16:43	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360	mg/L		12/08/21 16:43	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481	mg/L		12/08/21 16:43	1
Ethylbenzene	0.0101		0.00100	0.000515	mg/L		12/08/21 16:43	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200	mg/L		12/08/21 16:43	1
Isopropylbenzene	0.00498		0.00100	0.000161	mg/L		12/08/21 16:43	1
Methylene Chloride	<0.00191	U	0.00500	0.00191	mg/L		12/08/21 16:43	1
m,p-Xylenes	0.0387		0.0100	0.000330	mg/L		12/08/21 16:43	1
MTBE	<0.000571	U	0.00500	0.000571	mg/L		12/08/21 16:43	1
Naphthalene	<0.00200	U	0.0100	0.00200	mg/L		12/08/21 16:43	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286	mg/L		12/08/21 16:43	1
N-Propylbenzene	0.00280		0.00100	0.000179	mg/L		12/08/21 16:43	1
o-Xylene	0.00564		0.00100	0.000192	mg/L		12/08/21 16:43	1
p-Cymene (p-Isopropyltoluene)	0.000637	J	0.00100	0.000233	mg/L		12/08/21 16:43	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199	mg/L		12/08/21 16:43	1
Styrene	<0.000623	U	0.00100	0.000623	mg/L		12/08/21 16:43	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195	mg/L		12/08/21 16:43	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327	mg/L		12/08/21 16:43	1
1,1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284	mg/L		12/08/21 16:43	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L		12/08/21 16:43	1
Toluene	0.0200		0.00100	0.000500	mg/L		12/08/21 16:43	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256	mg/L		12/08/21 16:43	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-8862-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-8862-1

Date Collected: 12/01/21 08:48

Matrix: Water

Date Received: 12/01/21 15:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/08/21 16:43	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 16:43	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 16:43	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/08/21 16:43	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/08/21 16:43	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/08/21 16:43	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/08/21 16:43	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/08/21 16:43	1
1,2,4-Trimethylbenzene	0.0208		0.00100	0.000252 mg/L			12/08/21 16:43	1
1,3,5-Trimethylbenzene	0.00622		0.00100	0.000279 mg/L			12/08/21 16:43	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/08/21 16:43	1
Xylenes, Total	0.0443		0.0100	0.000330 mg/L			12/08/21 16:43	1
Total BTEX	0.0770		0.0100	0.00100 mg/L			12/08/21 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		74 - 124		12/08/21 16:43	1
Dibromofluoromethane (Surr)	95		75 - 131		12/08/21 16:43	1
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		12/08/21 16:43	1
Toluene-d8 (Surr)	101		80 - 117		12/08/21 16:43	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.497	J	0.500	0.0711 mg/L			12/07/21 23:08	1
Nitrate as N	0.144	H	0.100	0.0391 mg/L			12/07/21 23:08	1
Chloride	233		0.500	0.200 mg/L			12/07/21 23:08	1
Nitrite as N	<0.0293	U H	0.100	0.0293 mg/L			12/07/21 23:08	1
Fluoride	0.652		0.500	0.100 mg/L			12/07/21 23:08	1
Sulfate	42.0		0.500	0.109 mg/L			12/07/21 23:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	284		10.0	1.47 mg/L		12/09/21 08:12	12/11/21 21:33	50
Magnesium	55.9		0.200	0.0500 mg/L		12/09/21 08:12	12/11/21 21:15	1
Potassium	4.31		0.500	0.107 mg/L		12/09/21 08:12	12/11/21 21:15	1
Sodium	82.4		0.500	0.0667 mg/L		12/09/21 08:12	12/11/21 21:15	1
SiO2	65.1		1.07	0.0781 mg/L		12/09/21 08:12	12/11/21 21:15	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	-0.133			%			12/13/21 15:27	1
Alkalinity	644		4.00	4.00 mg/L			12/08/21 14:47	1
Bicarbonate Alkalinity as CaCO3	644		4.00	4.00 mg/L			12/08/21 14:47	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/08/21 14:47	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			12/08/21 14:47	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			12/08/21 14:47	1
Total Dissolved Solids	1040		20.0	20.0 mg/L			12/07/21 17:08	1
pH	6.9	HF		SU			12/13/21 14:07	1
Temperature	18.6	HF		Celsius			12/13/21 14:07	1

Eurofins Xenco, Midland

Surrogate Summary

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

Job ID: 880-8862-1
SDG: Hobbs NM

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
860-16643-E-6 MS	Matrix Spike	99	95	99	97
880-8862-1	Levey Well	97	95	106	101
LCS 860-33371/3	Lab Control Sample	98	95	99	97
LCSD 860-33371/4	Lab Control Sample Dup	98	95	99	97
MB 860-33371/9	Method Blank	97	95	103	100
Surrogate Legend					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
DCA = 1,2-Dichloroethane-d4 (Surr)					
TOL = Toluene-d8 (Surr)					

QC Sample Results

Client: Ensolum

Job ID: 880-8862-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-33371/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33371

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/08/21 13:59	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/08/21 13:59	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/08/21 13:59	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/08/21 13:59	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/08/21 13:59	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/08/21 13:59	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/08/21 13:59	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/08/21 13:59	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/08/21 13:59	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/08/21 13:59	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/08/21 13:59	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/08/21 13:59	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/08/21 13:59	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/08/21 13:59	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/08/21 13:59	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/08/21 13:59	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/08/21 13:59	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/08/21 13:59	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/08/21 13:59	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/08/21 13:59	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/08/21 13:59	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/08/21 13:59	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/08/21 13:59	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/08/21 13:59	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/08/21 13:59	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/08/21 13:59	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/08/21 13:59	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/08/21 13:59	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/08/21 13:59	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/08/21 13:59	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/08/21 13:59	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 13:59	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/08/21 13:59	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/08/21 13:59	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/08/21 13:59	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/08/21 13:59	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/08/21 13:59	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/08/21 13:59	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/08/21 13:59	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/08/21 13:59	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/08/21 13:59	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/08/21 13:59	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/08/21 13:59	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/08/21 13:59	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/08/21 13:59	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/08/21 13:59	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/08/21 13:59	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/08/21 13:59	1

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-8862-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-33371/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33371

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/08/21 13:59	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/08/21 13:59	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 13:59	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 13:59	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/08/21 13:59	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/08/21 13:59	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/08/21 13:59	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/08/21 13:59	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/08/21 13:59	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/08/21 13:59	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/08/21 13:59	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/08/21 13:59	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/08/21 13:59	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/08/21 13:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		74 - 124		12/08/21 13:59	1
Dibromofluoromethane (Surr)	95		75 - 131		12/08/21 13:59	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		12/08/21 13:59	1
Toluene-d8 (Surr)	100		80 - 117		12/08/21 13:59	1

Lab Sample ID: LCS 860-33371/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04682		mg/L		94	66 - 142
Bromobenzene	0.0500	0.04873		mg/L		97	75 - 125
Bromochloromethane	0.0500	0.04639		mg/L		93	60 - 140
Bromodichloromethane	0.0500	0.04876		mg/L		98	75 - 125
Bromoform	0.0500	0.04854		mg/L		97	75 - 125
Bromomethane	0.0500	0.04266		mg/L		85	60 - 140
2-Butanone	0.250	0.1904		mg/L		76	60 - 140
Carbon tetrachloride	0.0500	0.05152		mg/L		103	62 - 125
Chlorobenzene	0.0500	0.04753		mg/L		95	60 - 133
Chloroethane	0.0500	0.04054		mg/L		81	60 - 140
Chloroform	0.0500	0.04756		mg/L		95	70 - 130
Chloromethane	0.0500	0.04135		mg/L		83	60 - 140
2-Chlorotoluene	0.0500	0.05028		mg/L		101	73 - 125
4-Chlorotoluene	0.0500	0.05101		mg/L		102	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04810		mg/L		96	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04776		mg/L		96	74 - 125
Dibromochloromethane	0.0500	0.04970		mg/L		99	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04973		mg/L		99	59 - 125
1,2-Dibromoethane	0.0500	0.04704		mg/L		94	73 - 125
1,2-Dichlorobenzene	0.0500	0.05008		mg/L		100	75 - 125
1,3-Dichlorobenzene	0.0500	0.05003		mg/L		100	75 - 125
1,4-Dichlorobenzene	0.0500	0.04980		mg/L		100	75 - 125

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-8862-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-33371/3

Matrix: Water

Analysis Batch: 33371

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.04175		mg/L		83	70 - 130
1,1-Dichloroethane	0.0500	0.04515		mg/L		90	72 - 125
1,2-Dichloroethane	0.0500	0.04882		mg/L		98	68 - 127
1,1-Dichloroethene	0.0500	0.04886		mg/L		98	59 - 172
1,2-Dichloropropane	0.0500	0.04586		mg/L		92	74 - 125
1,3-Dichloropropane	0.0500	0.04715		mg/L		94	75 - 125
2,2-Dichloropropane	0.0500	0.05583		mg/L		112	75 - 125
1,1-Dichloropropene	0.0500	0.04931		mg/L		99	75 - 125
Ethylbenzene	0.0500	0.04943		mg/L		99	75 - 125
Hexachlorobutadiene	0.0500	0.06058		mg/L		121	75 - 125
Isopropylbenzene	0.0500	0.05176		mg/L		104	75 - 125
Methylene Chloride	0.0500	0.04266		mg/L		85	75 - 125
m,p-Xylenes	0.0500	0.05046		mg/L		101	75 - 125
MTBE	0.0500	0.04675		mg/L		93	65 - 135
Naphthalene	0.0500	0.06026		mg/L		121	70 - 130
n-Butylbenzene	0.0500	0.05495		mg/L		110	75 - 125
N-Propylbenzene	0.0500	0.05246		mg/L		105	75 - 125
o-Xylene	0.0500	0.05061		mg/L		101	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05503		mg/L		110	75 - 125
sec-Butylbenzene	0.0500	0.05483		mg/L		110	75 - 125
Styrene	0.0500	0.04795		mg/L		96	75 - 125
tert-Butylbenzene	0.0500	0.05292		mg/L		106	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04849		mg/L		97	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04639		mg/L		93	74 - 125
Tetrachloroethene	0.0500	0.05294		mg/L		106	71 - 125
Toluene	0.0500	0.04718		mg/L		94	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04711		mg/L		94	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04995		mg/L		100	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.06259		mg/L		125	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05923		mg/L		118	75 - 135
1,1,1-Trichloroethane	0.0500	0.04899		mg/L		98	75 - 125
1,1,2-Trichloroethane	0.0500	0.04756		mg/L		95	75 - 127
Trichloroethene	0.0500	0.04993		mg/L		100	62 - 137
Trichlorofluoromethane	0.0500	0.04901		mg/L		98	60 - 140
1,2,3-Trichloropropane	0.0500	0.04664		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05271		mg/L		105	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05233		mg/L		105	60 - 140
Vinyl chloride	0.0500	0.03923		mg/L		78	60 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	95		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 117

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QC Sample Results

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

Job ID: 880-8862-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-33371/4

Matrix: Water

Analysis Batch: 33371

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	0.04765		mg/L		95	66 - 142	2	25
Bromobenzene	0.0500	0.05039		mg/L		101	75 - 125	3	25
Bromochloromethane	0.0500	0.04739		mg/L		95	60 - 140	2	25
Bromodichloromethane	0.0500	0.04950		mg/L		99	75 - 125	2	25
Bromoform	0.0500	0.04904		mg/L		98	75 - 125	1	25
Bromomethane	0.0500	0.04306		mg/L		86	60 - 140	1	25
2-Butanone	0.250	0.1888		mg/L		76	60 - 140	1	25
Carbon tetrachloride	0.0500	0.05044		mg/L		101	62 - 125	2	25
Chlorobenzene	0.0500	0.04884		mg/L		98	60 - 133	3	25
Chloroethane	0.0500	0.04089		mg/L		82	60 - 140	1	25
Chloroform	0.0500	0.04844		mg/L		97	70 - 130	2	25
Chloromethane	0.0500	0.03988		mg/L		80	60 - 140	4	25
2-Chlorotoluene	0.0500	0.05179		mg/L		104	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05202		mg/L		104	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.04848		mg/L		97	75 - 125	1	25
cis-1,3-Dichloropropene	0.0500	0.04957		mg/L		99	74 - 125	4	25
Dibromochloromethane	0.0500	0.05045		mg/L		101	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04979		mg/L		100	59 - 125	0	25
1,2-Dibromoethane	0.0500	0.04801		mg/L		96	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05090		mg/L		102	75 - 125	2	25
1,3-Dichlorobenzene	0.0500	0.05165		mg/L		103	75 - 125	3	25
1,4-Dichlorobenzene	0.0500	0.05093		mg/L		102	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.03615		mg/L		72	70 - 130	14	25
1,1-Dichloroethane	0.0500	0.04528		mg/L		91	72 - 125	0	25
1,2-Dichloroethane	0.0500	0.04944		mg/L		99	68 - 127	1	25
1,1-Dichloroethene	0.0500	0.04775		mg/L		96	59 - 172	2	25
1,2-Dichloropropane	0.0500	0.04718		mg/L		94	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.04831		mg/L		97	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.05567		mg/L		111	75 - 125	0	25
1,1-Dichloropropene	0.0500	0.04896		mg/L		98	75 - 125	1	25
Ethylbenzene	0.0500	0.05033		mg/L		101	75 - 125	2	25
Hexachlorobutadiene	0.0500	0.05962		mg/L		119	75 - 125	2	25
Isopropylbenzene	0.0500	0.05241		mg/L		105	75 - 125	1	25
Methylene Chloride	0.0500	0.04275		mg/L		86	75 - 125	0	25
m,p-Xylenes	0.0500	0.05155		mg/L		103	75 - 125	2	25
MTBE	0.0500	0.04762		mg/L		95	65 - 135	2	25
Naphthalene	0.0500	0.06222		mg/L		124	70 - 130	3	25
n-Butylbenzene	0.0500	0.05443		mg/L		109	75 - 125	1	25
N-Propylbenzene	0.0500	0.05286		mg/L		106	75 - 125	1	25
o-Xylene	0.0500	0.05144		mg/L		103	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05533		mg/L		111	75 - 125	1	25
sec-Butylbenzene	0.0500	0.05419		mg/L		108	75 - 125	1	25
Styrene	0.0500	0.04954		mg/L		99	75 - 125	3	25
tert-Butylbenzene	0.0500	0.05350		mg/L		107	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.05003		mg/L		100	72 - 125	3	25
1,1,2,2-Tetrachloroethane	0.0500	0.04853		mg/L		97	74 - 125	5	25
Tetrachloroethene	0.0500	0.05238		mg/L		105	71 - 125	1	25
Toluene	0.0500	0.04790		mg/L		96	59 - 139	2	25

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QC Sample Results

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

Job ID: 880-8862-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-33371/4

Matrix: Water

Analysis Batch: 33371

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	0.04690		mg/L		94	75 - 125	0	25
trans-1,3-Dichloropropene	0.0500	0.05118		mg/L		102	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.06369		mg/L		127	75 - 137	2	25
1,2,4-Trichlorobenzene	0.0500	0.05962		mg/L		119	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.04897		mg/L		98	75 - 125	0	25
1,1,2-Trichloroethane	0.0500	0.04895		mg/L		98	75 - 127	3	25
Trichloroethene	0.0500	0.05002		mg/L		100	62 - 137	0	25
Trichlorofluoromethane	0.0500	0.04955		mg/L		99	60 - 140	1	25
1,2,3-Trichloropropane	0.0500	0.04784		mg/L		96	75 - 125	3	25
1,2,4-Trimethylbenzene	0.0500	0.05391		mg/L		108	75 - 125	2	25
1,3,5-Trimethylbenzene	0.0500	0.05280		mg/L		106	60 - 140	1	25
Vinyl chloride	0.0500	0.03881		mg/L		78	60 - 140	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	95		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-33124/59

Matrix: Water

Analysis Batch: 33124

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			12/07/21 19:29	1
Chloride	<0.200	U	0.500	0.200 mg/L			12/07/21 19:29	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/07/21 19:29	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/07/21 19:29	1

Lab Sample ID: LCS 860-33124/60

Matrix: Water

Analysis Batch: 33124

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	10.0	10.11		mg/L		101	90 - 110
Chloride	10.0	10.37		mg/L		104	90 - 110
Fluoride	10.0	10.28		mg/L		103	90 - 110
Sulfate	10.0	9.717		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-33124/61

Matrix: Water

Analysis Batch: 33124

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	9.923		mg/L		99	90 - 110	2	20
Chloride	10.0	10.62		mg/L		106	90 - 110	2	20
Fluoride	10.0	10.17		mg/L		102	90 - 110	1	20

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QC Sample Results

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

Job ID: 880-8862-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-33124/61

Matrix: Water

Analysis Batch: 33124

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	9.578		mg/L		96	90 - 110	1	20

Lab Sample ID: MB 860-33125/59

Matrix: Water

Analysis Batch: 33125

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			12/07/21 19:29	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/07/21 19:29	1

Lab Sample ID: LCS 860-33125/60

Matrix: Water

Analysis Batch: 33125

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	9.958		mg/L		100	80 - 120
Nitrite as N	5.00	5.092		mg/L		102	80 - 120

Lab Sample ID: LCSD 860-33125/61

Matrix: Water

Analysis Batch: 33125

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	9.781		mg/L		98	80 - 120	2	20
Nitrite as N	5.00	5.001		mg/L		100	80 - 120	2	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-33529/1-A

Matrix: Water

Analysis Batch: 33990

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 33529

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.0293	U	0.200	0.0293 mg/L		12/09/21 08:12	12/11/21 20:21	1
Magnesium	<0.0500	U	0.200	0.0500 mg/L		12/09/21 08:12	12/11/21 20:21	1
Potassium	<0.107	U	0.500	0.107 mg/L		12/09/21 08:12	12/11/21 20:21	1
Sodium	<0.0667	U	0.500	0.0667 mg/L		12/09/21 08:12	12/11/21 20:21	1
SiO2	<0.0781	U	1.07	0.0781 mg/L		12/09/21 08:12	12/11/21 20:21	1

Lab Sample ID: LCS 860-33529/2-A

Matrix: Water

Analysis Batch: 33990

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 33529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	25.0	25.21		mg/L		101	85 - 115
Magnesium	25.0	25.08		mg/L		100	85 - 115
Potassium	10.0	10.13		mg/L		101	85 - 115
Sodium	25.0	25.26		mg/L		101	85 - 115
SiO2	21.4	21.64		mg/L		101	85 - 115

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QC Sample Results

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

Job ID: 880-8862-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-33529/3-A

Matrix: Water

Analysis Batch: 33990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 33529

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		
Calcium	25.0	25.23		mg/L		101	85 - 115	0	20
Magnesium	25.0	25.10		mg/L		100	85 - 115	0	20
Potassium	10.0	10.14		mg/L		101	85 - 115	0	20
Sodium	25.0	25.34		mg/L		101	85 - 115	0	20
SiO2	21.4	21.77		mg/L		102	85 - 115	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-33477/4

Matrix: Water

Analysis Batch: 33477

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			12/08/21 12:30	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			12/08/21 12:30	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			12/08/21 12:30	1
Hydroxide Alkalinity	<4.00	U	4.00	mg/L			12/08/21 12:30	1
Phenolphthalein Alkalinity	<4.00	U	4.00	mg/L			12/08/21 12:30	1

Lab Sample ID: LCS 860-33477/5

Matrix: Water

Analysis Batch: 33477

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Alkalinity	250	233.4		mg/L		93	85 - 115	

Lab Sample ID: LCSD 860-33477/6

Matrix: Water

Analysis Batch: 33477

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	Limits
Alkalinity			250	233.8		mg/L		94	85 - 115	0	20

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

Lab Sample ID: MB 860-33296/1

Matrix: Water

Analysis Batch: 33296

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			12/07/21 17:08	1

Lab Sample ID: LCS 860-33296/2

Matrix: Water

Analysis Batch: 33296

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	994.0		mg/L		99	80 - 120	

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QC Sample Results

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

Job ID: 880-8862-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-33296/3				Client Sample ID: Lab Control Sample Dup							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 33296											
				Spike	LCSD	LCSD			%Rec.	RPD	
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD Limit
Total Dissolved Solids				1000	995.0		mg/L		100	80 - 120	0 10

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-8862-1 DU				Client Sample ID: Levey Well							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 34018											
				Sample	Sample	DU	DU			RPD	
Analyte				Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
pH				6.9	HF	6.9		SU		0.3	20
Temperature				18.6	HF	18.6		Celsius		0	20

QC Association Summary

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

Job ID: 880-8862-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 33371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total/NA	Water	8260C	
MB 860-33371/9	Method Blank	Total/NA	Water	8260C	
LCS 860-33371/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-33371/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 33124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total/NA	Water	300.0	
MB 860-33124/59	Method Blank	Total/NA	Water	300.0	
LCS 860-33124/60	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33124/61	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 33125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total/NA	Water	300.0	
MB 860-33125/59	Method Blank	Total/NA	Water	300.0	
LCS 860-33125/60	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33125/61	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 33529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-33529/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-33529/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-33529/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	

Analysis Batch: 33990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	33529
880-8862-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	33529
MB 860-33529/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	33529
LCS 860-33529/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	33529
LCSD 860-33529/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	33529

General Chemistry

Analysis Batch: 33296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-33296/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-33296/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-33296/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 33477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-33477/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-33477/5	Lab Control Sample	Total/NA	Water	SM 2320B	

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-8862-1
SDG: Hobbs NM

General Chemistry (Continued)

Analysis Batch: 33477 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 860-33477/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 34018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total/NA	Water	SM 4500 H+ B	
880-8862-1 DU	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 34028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8862-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-8862-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-8862-1

Date Collected: 12/01/21 08:48

Matrix: Water

Date Received: 12/01/21 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	33371	12/08/21 16:43	TTD	XEN STF
Total/NA	Analysis	300.0		1	33124	12/07/21 23:08	ANP	XEN STF
Total/NA	Analysis	300.0		1	33125	12/07/21 23:08	ANP	XEN STF
Total Recoverable	Prep	200.7			33529	12/09/21 08:12	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		1	33990	12/11/21 21:15	AV	XEN STF
Total Recoverable	Prep	200.7			33529	12/09/21 08:12	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		50	33990	12/11/21 21:33	AV	XEN STF
Total/NA	Analysis	SM 1030E		1	34028	12/13/21 15:27	AA	XEN STF
Total/NA	Analysis	SM 2320B		1	33477	12/08/21 14:47	YGG	XEN STF
Total/NA	Analysis	SM 2540C		1	33296	12/07/21 17:08	ADL	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	34018	12/13/21 14:07	TL	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 880-8862-1
SDG: Hobbs NM

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	SiO2
8260C		Water	Total BTEX
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 Hobb NM - 03B1417001

Job ID: 880-8862-1
SDG: Hobbs NM

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

Protocol References:

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

Laboratory References:

- XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-8862-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-8862-1	Levey Well	Water	12/01/21 08:48	12/01/21 15:25

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Midland TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3333
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 281-1111
Hobbs, NM (575-392-7550)



880-8862 Chain of Custody

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

Page 22 of 24

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-8862-1

SDG Number: Hobbs NM

Login Number: 8862

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-8862-1

SDG Number: Hobbs NM

Login Number: 8862

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

List Creation: 12/07/21 11:20 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.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9162-1

Laboratory Sample Delivery Group: Hobbs NM

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

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

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

Authorized for release by:
12/15/2021 6:29:04 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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

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

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

Laboratory Job ID: 880-9162-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-9162-1
SDG: Hobbs NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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 Hobb NM - 03B1417001

Job ID: 880-9162-1
SDG: Hobbs NM

Job ID: 880-9162-1

Laboratory: Eurofins Xenco, Midland

Narrative	
	Job Narrative 880-9162-1

Receipt

The sample was received on 12/8/2021 4:47 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.7°C

GC/MS VOA

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 860-34093 recovered outside control limits for the following analytes: MTBE and trans-1,2-Dichloroethene.

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-34093 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/LCSD) recovery was within acceptance limits.

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

HPLC/IC

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

Metals

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: 880-9162-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9162-1

Date Collected: 12/08/21 08:31

Matrix: Water

Date Received: 12/08/21 16:47

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00402		0.00100	0.000214	mg/L		12/14/21 15:39	1
Bromobenzene	<0.000300	U	0.00100	0.000300	mg/L		12/14/21 15:39	1
Bromochloromethane	<0.000209	U	0.00100	0.000209	mg/L		12/14/21 15:39	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231	mg/L		12/14/21 15:39	1
Bromoform	<0.000630	U	0.00500	0.000630	mg/L		12/14/21 15:39	1
Bromomethane	<0.00105	U	0.00500	0.00105	mg/L		12/14/21 15:39	1
2-Butanone	<0.00270	U	0.0500	0.00270	mg/L		12/14/21 15:39	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L		12/14/21 15:39	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L		12/14/21 15:39	1
Chloroethane	<0.000433	U	0.0100	0.000433	mg/L		12/14/21 15:39	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L		12/14/21 15:39	1
Chloromethane	<0.000318	U	0.0100	0.000318	mg/L		12/14/21 15:39	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214	mg/L		12/14/21 15:39	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183	mg/L		12/14/21 15:39	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174	mg/L		12/14/21 15:39	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690	mg/L		12/14/21 15:39	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739	mg/L		12/14/21 15:39	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319	mg/L		12/14/21 15:39	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337	mg/L		12/14/21 15:39	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236	mg/L		12/14/21 15:39	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197	mg/L		12/14/21 15:39	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199	mg/L		12/14/21 15:39	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316	mg/L		12/14/21 15:39	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244	mg/L		12/14/21 15:39	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285	mg/L		12/14/21 15:39	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216	mg/L		12/14/21 15:39	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396	mg/L		12/14/21 15:39	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439	mg/L		12/14/21 15:39	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360	mg/L		12/14/21 15:39	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481	mg/L		12/14/21 15:39	1
Ethylbenzene	0.0164		0.00100	0.000515	mg/L		12/14/21 15:39	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200	mg/L		12/14/21 15:39	1
Isopropylbenzene	0.00794		0.00100	0.000161	mg/L		12/14/21 15:39	1
Methylene Chloride	<0.00191	U	0.00500	0.00191	mg/L		12/14/21 15:39	1
m,p-Xylenes	0.0631		0.0100	0.000330	mg/L		12/14/21 15:39	1
MTBE	<0.000571	U *1	0.00500	0.000571	mg/L		12/14/21 15:39	1
Naphthalene	<0.00200	U	0.0100	0.00200	mg/L		12/14/21 15:39	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286	mg/L		12/14/21 15:39	1
N-Propylbenzene	0.00465		0.00100	0.000179	mg/L		12/14/21 15:39	1
o-Xylene	0.00969		0.00100	0.000192	mg/L		12/14/21 15:39	1
p-Cymene (p-Isopropyltoluene)	0.00106		0.00100	0.000233	mg/L		12/14/21 15:39	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199	mg/L		12/14/21 15:39	1
Styrene	<0.000623	U	0.00100	0.000623	mg/L		12/14/21 15:39	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195	mg/L		12/14/21 15:39	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327	mg/L		12/14/21 15:39	1
1,1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284	mg/L		12/14/21 15:39	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L		12/14/21 15:39	1
Toluene	0.0320		0.00100	0.000500	mg/L		12/14/21 15:39	1
trans-1,2-Dichloroethene	<0.000256	U *1	0.00100	0.000256	mg/L		12/14/21 15:39	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9162-1

Date Collected: 12/08/21 08:31

Matrix: Water

Date Received: 12/08/21 16:47

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/14/21 15:39	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 15:39	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 15:39	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/14/21 15:39	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/14/21 15:39	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/14/21 15:39	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/14/21 15:39	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/14/21 15:39	1
1,2,4-Trimethylbenzene	0.0341		0.00100	0.000252 mg/L			12/14/21 15:39	1
1,3,5-Trimethylbenzene	0.00992		0.00100	0.000279 mg/L			12/14/21 15:39	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/14/21 15:39	1
Xylenes, Total	0.0728		0.0100	0.000330 mg/L			12/14/21 15:39	1
Total BTEX	0.125		0.0100	0.00100 mg/L			12/14/21 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		74 - 124		12/14/21 15:39	1
Dibromofluoromethane (Surr)	100		75 - 131		12/14/21 15:39	1
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		12/14/21 15:39	1
Toluene-d8 (Surr)	106		80 - 117		12/14/21 15:39	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.516		0.500	0.0711 mg/L			12/09/21 14:39	1
Nitrate as N	0.187		0.100	0.0391 mg/L			12/09/21 14:39	1
Chloride	230		0.500	0.200 mg/L			12/09/21 14:39	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/09/21 14:39	1
Fluoride	0.620		0.500	0.100 mg/L			12/09/21 14:39	1
Sulfate	42.5		0.500	0.109 mg/L			12/09/21 14:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	261		10.0	1.47 mg/L		12/14/21 09:00	12/15/21 00:36	50
Magnesium	55.8		0.200	0.0500 mg/L		12/14/21 09:00	12/15/21 00:14	1
Potassium	4.20		0.500	0.107 mg/L		12/14/21 09:00	12/15/21 00:14	1
Sodium	82.9	B	0.500	0.0667 mg/L		12/14/21 09:00	12/15/21 00:14	1
SiO2	58.2		1.07	0.0781 mg/L		12/14/21 09:00	12/15/21 00:14	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	-1.56			%			12/15/21 17:58	1
Alkalinity	633		4.00	4.00 mg/L			12/13/21 19:37	1
Bicarbonate Alkalinity as CaCO3	633		4.00	4.00 mg/L			12/13/21 19:37	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/13/21 19:37	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			12/13/21 19:37	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			12/13/21 19:37	1
Total Dissolved Solids	1200		20.0	20.0 mg/L			12/13/21 13:46	1
pH	6.5	HF		SU			12/14/21 15:35	1
Temperature	19.2	HF		Celsius			12/14/21 15:35	1

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Surrogate Summary

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

Job ID: 880-9162-1
SDG: Hobbs NM

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
880-9013-D-1 MS	Matrix Spike	98	100	103	98
880-9162-1	Levey Well	102	100	106	106
LCS 860-34093/3	Lab Control Sample	100	100	103	100
LCSD 860-34093/4	Lab Control Sample Dup	103	99	102	100
MB 860-34093/8	Method Blank	105	99	104	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

Job ID: 880-9162-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-34093/8

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34093

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/14/21 13:14	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/14/21 13:14	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/14/21 13:14	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/14/21 13:14	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/14/21 13:14	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/14/21 13:14	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/14/21 13:14	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/14/21 13:14	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/14/21 13:14	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/14/21 13:14	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/14/21 13:14	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/14/21 13:14	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/14/21 13:14	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/14/21 13:14	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/14/21 13:14	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/14/21 13:14	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/14/21 13:14	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/14/21 13:14	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/14/21 13:14	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/14/21 13:14	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/14/21 13:14	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/14/21 13:14	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/14/21 13:14	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/14/21 13:14	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/14/21 13:14	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/14/21 13:14	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/14/21 13:14	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/14/21 13:14	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/14/21 13:14	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/14/21 13:14	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/14/21 13:14	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 13:14	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/14/21 13:14	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/14/21 13:14	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/14/21 13:14	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/14/21 13:14	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/14/21 13:14	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/14/21 13:14	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/14/21 13:14	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/14/21 13:14	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/14/21 13:14	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/14/21 13:14	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/14/21 13:14	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/14/21 13:14	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/14/21 13:14	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/14/21 13:14	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/14/21 13:14	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/14/21 13:14	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9162-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-34093/8

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34093

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/14/21 13:14	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/14/21 13:14	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 13:14	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 13:14	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/14/21 13:14	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/14/21 13:14	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/14/21 13:14	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/14/21 13:14	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/14/21 13:14	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/14/21 13:14	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/14/21 13:14	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/14/21 13:14	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/14/21 13:14	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/14/21 13:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		74 - 124		12/14/21 13:14	1
Dibromofluoromethane (Surr)	99		75 - 131		12/14/21 13:14	1
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		12/14/21 13:14	1
Toluene-d8 (Surr)	104		80 - 117		12/14/21 13:14	1

Lab Sample ID: LCS 860-34093/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05495		mg/L		110	66 - 142
Bromobenzene	0.0500	0.05661		mg/L		113	75 - 125
Bromochloromethane	0.0500	0.05114		mg/L		102	60 - 140
Bromodichloromethane	0.0500	0.04923		mg/L		98	75 - 125
Bromoform	0.0500	0.04812		mg/L		96	75 - 125
Bromomethane	0.0500	0.04906		mg/L		98	60 - 140
2-Butanone	0.250	0.2417		mg/L		97	60 - 140
Carbon tetrachloride	0.0500	0.04734		mg/L		95	62 - 125
Chlorobenzene	0.0500	0.05451		mg/L		109	60 - 133
Chloroethane	0.0500	0.04737		mg/L		95	60 - 140
Chloroform	0.0500	0.05588		mg/L		112	70 - 130
Chloromethane	0.0500	0.04873		mg/L		97	60 - 140
2-Chlorotoluene	0.0500	0.05532		mg/L		111	73 - 125
4-Chlorotoluene	0.0500	0.05488		mg/L		110	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05563		mg/L		111	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05540		mg/L		111	74 - 125
Dibromochloromethane	0.0500	0.05562		mg/L		111	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05047		mg/L		101	59 - 125
1,2-Dibromoethane	0.0500	0.05513		mg/L		110	73 - 125
1,2-Dichlorobenzene	0.0500	0.05621		mg/L		112	75 - 125
1,3-Dichlorobenzene	0.0500	0.05624		mg/L		112	75 - 125
1,4-Dichlorobenzene	0.0500	0.05442		mg/L		109	75 - 125

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QC Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-34093/3

Matrix: Water

Analysis Batch: 34093

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.04805		mg/L		96	70 - 130
1,1-Dichloroethane	0.0500	0.05514		mg/L		110	72 - 125
1,2-Dichloroethane	0.0500	0.05607		mg/L		112	68 - 127
1,1-Dichloroethene	0.0500	0.04953		mg/L		99	59 - 172
1,2-Dichloropropane	0.0500	0.05037		mg/L		101	74 - 125
1,3-Dichloropropane	0.0500	0.05501		mg/L		110	75 - 125
2,2-Dichloropropane	0.0500	0.05024		mg/L		100	75 - 125
1,1-Dichloropropene	0.0500	0.05573		mg/L		111	75 - 125
Ethylbenzene	0.0500	0.05379		mg/L		108	75 - 125
Hexachlorobutadiene	0.0500	0.06169		mg/L		123	75 - 125
Isopropylbenzene	0.0500	0.05403		mg/L		108	75 - 125
Methylene Chloride	0.0500	0.06101		mg/L		122	75 - 125
m,p-Xylenes	0.0500	0.05424		mg/L		108	75 - 125
MTBE	0.0500	0.05962		mg/L		119	65 - 135
Naphthalene	0.0500	0.05038		mg/L		101	70 - 130
n-Butylbenzene	0.0500	0.05878		mg/L		118	75 - 125
N-Propylbenzene	0.0500	0.05467		mg/L		109	75 - 125
o-Xylene	0.0500	0.05425		mg/L		109	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05682		mg/L		114	75 - 125
sec-Butylbenzene	0.0500	0.05556		mg/L		111	75 - 125
Styrene	0.0500	0.05607		mg/L		112	75 - 125
tert-Butylbenzene	0.0500	0.05495		mg/L		110	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05629		mg/L		113	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05403		mg/L		108	74 - 125
Tetrachloroethene	0.0500	0.04803		mg/L		96	71 - 125
Toluene	0.0500	0.05446		mg/L		109	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05406		mg/L		108	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05648		mg/L		113	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05243		mg/L		105	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05120		mg/L		102	75 - 135
1,1,1-Trichloroethane	0.0500	0.04836		mg/L		97	75 - 125
1,1,2-Trichloroethane	0.0500	0.05120		mg/L		102	75 - 127
Trichloroethene	0.0500	0.04841		mg/L		97	62 - 137
Trichlorofluoromethane	0.0500	0.05098		mg/L		102	60 - 140
1,2,3-Trichloropropane	0.0500	0.05495		mg/L		110	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05443		mg/L		109	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05446		mg/L		109	60 - 140
Vinyl chloride	0.0500	0.04723		mg/L		94	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	103		63 - 144
Toluene-d8 (Surr)	100		80 - 117

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-34093/4

Matrix: Water

Analysis Batch: 34093

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
Benzene	0.0500	0.05195		mg/L		104	66 - 142	6	25
Bromobenzene	0.0500	0.05457		mg/L		109	75 - 125	4	25
Bromochloromethane	0.0500	0.04856		mg/L		97	60 - 140	5	25
Bromodichloromethane	0.0500	0.04628		mg/L		93	75 - 125	6	25
Bromoform	0.0500	0.04445		mg/L		89	75 - 125	8	25
Bromomethane	0.0500	0.04998		mg/L		100	60 - 140	2	25
2-Butanone	0.250	0.2231		mg/L		89	60 - 140	8	25
Carbon tetrachloride	0.0500	0.04515		mg/L		90	62 - 125	5	25
Chlorobenzene	0.0500	0.05157		mg/L		103	60 - 133	6	25
Chloroethane	0.0500	0.04114		mg/L		82	60 - 140	14	25
Chloroform	0.0500	0.05279		mg/L		106	70 - 130	6	25
Chloromethane	0.0500	0.04958		mg/L		99	60 - 140	2	25
2-Chlorotoluene	0.0500	0.05378		mg/L		108	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05306		mg/L		106	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.05282		mg/L		106	75 - 125	5	25
cis-1,3-Dichloropropene	0.0500	0.05253		mg/L		105	74 - 125	5	25
Dibromochloromethane	0.0500	0.05139		mg/L		103	73 - 125	8	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05083		mg/L		102	59 - 125	1	25
1,2-Dibromoethane	0.0500	0.05018		mg/L		100	73 - 125	9	25
1,2-Dichlorobenzene	0.0500	0.05467		mg/L		109	75 - 125	3	25
1,3-Dichlorobenzene	0.0500	0.05427		mg/L		109	75 - 125	4	25
1,4-Dichlorobenzene	0.0500	0.05302		mg/L		106	75 - 125	3	25
Dichlorodifluoromethane	0.0500	0.04978		mg/L		100	70 - 130	4	25
1,1-Dichloroethane	0.0500	0.05264		mg/L		105	72 - 125	5	25
1,2-Dichloroethane	0.0500	0.05255		mg/L		105	68 - 127	6	25
1,1-Dichloroethene	0.0500	0.04787		mg/L		96	59 - 172	3	25
1,2-Dichloropropane	0.0500	0.04735		mg/L		95	74 - 125	6	25
1,3-Dichloropropane	0.0500	0.05075		mg/L		102	75 - 125	8	25
2,2-Dichloropropane	0.0500	0.04843		mg/L		97	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.05304		mg/L		106	75 - 125	5	25
Ethylbenzene	0.0500	0.05072		mg/L		101	75 - 125	6	25
Hexachlorobutadiene	0.0500	0.05704		mg/L		114	75 - 125	8	25
Isopropylbenzene	0.0500	0.05114		mg/L		102	75 - 125	5	25
Methylene Chloride	0.0500	0.04947		mg/L		99	75 - 125	21	25
m,p-Xylenes	0.0500	0.05090		mg/L		102	75 - 125	6	25
MTBE	0.0500	0.04576	*1	mg/L		92	65 - 135	26	25
Naphthalene	0.0500	0.05268		mg/L		105	70 - 130	4	25
n-Butylbenzene	0.0500	0.05714		mg/L		114	75 - 125	3	25
N-Propylbenzene	0.0500	0.05316		mg/L		106	75 - 125	3	25
o-Xylene	0.0500	0.05116		mg/L		102	75 - 125	6	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05472		mg/L		109	75 - 125	4	25
sec-Butylbenzene	0.0500	0.05420		mg/L		108	75 - 125	2	25
Styrene	0.0500	0.05265		mg/L		105	75 - 125	6	25
tert-Butylbenzene	0.0500	0.05337		mg/L		107	75 - 125	3	25
1,1,1,2-Tetrachloroethane	0.0500	0.05262		mg/L		105	72 - 125	7	25
1,1,2,2-Tetrachloroethane	0.0500	0.05171		mg/L		103	74 - 125	4	25
Tetrachloroethene	0.0500	0.04650		mg/L		93	71 - 125	3	25
Toluene	0.0500	0.05088		mg/L		102	59 - 139	7	25

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-34093/4

Matrix: Water

Analysis Batch: 34093

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	0.04131	*1	mg/L		83	75 - 125	27	25
trans-1,3-Dichloropropene	0.0500	0.05205		mg/L		104	66 - 125	8	25
1,2,3-Trichlorobenzene	0.0500	0.05250		mg/L		105	75 - 137	0	25
1,2,4-Trichlorobenzene	0.0500	0.05092		mg/L		102	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.04588		mg/L		92	75 - 125	5	25
1,1,2-Trichloroethane	0.0500	0.04737		mg/L		95	75 - 127	8	25
Trichloroethene	0.0500	0.04589		mg/L		92	62 - 137	5	25
Trichlorofluoromethane	0.0500	0.05226		mg/L		105	60 - 140	2	25
1,2,3-Trichloropropane	0.0500	0.05261		mg/L		105	75 - 125	4	25
1,2,4-Trimethylbenzene	0.0500	0.05280		mg/L		106	75 - 125	3	25
1,3,5-Trimethylbenzene	0.0500	0.05279		mg/L		106	60 - 140	3	25
Vinyl chloride	0.0500	0.04750		mg/L		95	60 - 140	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	102		63 - 144
Toluene-d8 (Surr)	100		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-33512/3

Matrix: Water

Analysis Batch: 33512

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			12/08/21 21:44	1
Chloride	<0.200	U	0.500	0.200 mg/L			12/08/21 21:44	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/08/21 21:44	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/08/21 21:44	1

Lab Sample ID: MB 860-33512/68

Matrix: Water

Analysis Batch: 33512

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			12/09/21 11:06	1
Chloride	<0.200	U	0.500	0.200 mg/L			12/09/21 11:06	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/09/21 11:06	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/09/21 11:06	1

Lab Sample ID: LCS 860-33512/4

Matrix: Water

Analysis Batch: 33512

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	9.815		mg/L		98	90 - 110
Chloride	10.0	10.61		mg/L		106	90 - 110
Fluoride	10.0	10.04		mg/L		100	90 - 110

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-33512/4

Matrix: Water

Analysis Batch: 33512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.696		mg/L		97	90 - 110

Lab Sample ID: LCS 860-33512/69

Matrix: Water

Analysis Batch: 33512

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	9.816		mg/L		98	90 - 110
Chloride	10.0	10.62		mg/L		106	90 - 110
Fluoride	10.0	10.02		mg/L		100	90 - 110
Sulfate	10.0	9.697		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-33512/5

Matrix: Water

Analysis Batch: 33512

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	9.795		mg/L		98	90 - 110	0	20
Chloride	10.0	10.29		mg/L		103	90 - 110	3	20
Fluoride	10.0	10.04		mg/L		100	90 - 110	0	20
Sulfate	10.0	9.647		mg/L		96	90 - 110	1	20

Lab Sample ID: LCSD 860-33512/70

Matrix: Water

Analysis Batch: 33512

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	9.797		mg/L		98	90 - 110	0	20
Chloride	10.0	10.30		mg/L		103	90 - 110	3	20
Fluoride	10.0	10.04		mg/L		100	90 - 110	0	20
Sulfate	10.0	9.672		mg/L		97	90 - 110	0	20

Lab Sample ID: MB 860-33513/3

Matrix: Water

Analysis Batch: 33513

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			12/08/21 21:44	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/08/21 21:44	1

Lab Sample ID: MB 860-33513/68

Matrix: Water

Analysis Batch: 33513

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			12/09/21 11:06	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/09/21 11:06	1

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QC Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-33513/4

Matrix: Water

Analysis Batch: 33513

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	9.679		mg/L		97	80 - 120
Nitrite as N	5.00	5.114		mg/L		102	80 - 120

Lab Sample ID: LCS 860-33513/69

Matrix: Water

Analysis Batch: 33513

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	9.681		mg/L		97	80 - 120
Nitrite as N	5.00	5.118		mg/L		102	80 - 120

Lab Sample ID: LCSD 860-33513/5

Matrix: Water

Analysis Batch: 33513

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	9.673		mg/L		97	80 - 120	0	20
Nitrite as N	5.00	5.101		mg/L		102	80 - 120	0	20

Lab Sample ID: LCSD 860-33513/70

Matrix: Water

Analysis Batch: 33513

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	9.678		mg/L		97	80 - 120	0	20
Nitrite as N	5.00	5.105		mg/L		102	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-34100/1-A

Matrix: Water

Analysis Batch: 34324

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 34100

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.0293	U	0.200	0.0293 mg/L		12/14/21 09:00	12/14/21 22:21	1
Magnesium	<0.0500	U	0.200	0.0500 mg/L		12/14/21 09:00	12/14/21 22:21	1
Potassium	<0.107	U	0.500	0.107 mg/L		12/14/21 09:00	12/14/21 22:21	1
SiO2	<0.0781	U	1.07	0.0781 mg/L		12/14/21 09:00	12/14/21 22:21	1

Lab Sample ID: LCS 860-34100/2-A

Matrix: Water

Analysis Batch: 34324

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 34100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	25.0	25.29		mg/L		101	85 - 115
Magnesium	25.0	25.58		mg/L		102	85 - 115
Potassium	10.0	10.24		mg/L		102	85 - 115
SiO2	21.4	19.66		mg/L		92	85 - 115

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QC Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-34100/3-A

Matrix: Water

Analysis Batch: 34324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 34100

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	RPD Limit
							Limits			
Calcium	25.0	24.64		mg/L		99	85 - 115		3	20
Magnesium	25.0	24.92		mg/L		100	85 - 115		3	20
Potassium	10.0	10.04		mg/L		100	85 - 115		2	20
SiO2	21.4	19.78		mg/L		92	85 - 115		1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-34086/39

Matrix: Water

Analysis Batch: 34086

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			12/13/21 18:30	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			12/13/21 18:30	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			12/13/21 18:30	1
Hydroxide Alkalinity	<4.00	U	4.00	mg/L			12/13/21 18:30	1
Phenolphthalein Alkalinity	<4.00	U	4.00	mg/L			12/13/21 18:30	1

Lab Sample ID: LCS 860-34086/40

Matrix: Water

Analysis Batch: 34086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	
Alkalinity	250	235.7		mg/L		94	85 - 115	

Lab Sample ID: LCSD 860-34086/41

Matrix: Water

Analysis Batch: 34086

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	237.3		mg/L		95	85 - 115	1	20

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

Lab Sample ID: MB 860-34012/1

Matrix: Water

Analysis Batch: 34012

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			12/13/21 13:46	1

Lab Sample ID: LCS 860-34012/2

Matrix: Water

Analysis Batch: 34012

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	
Total Dissolved Solids	1000	1095		mg/L		110	80 - 120	

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QC Sample Results

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

Job ID: 880-9162-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-34012/3				Client Sample ID: Lab Control Sample Dup							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 34012											
				Spike	LCSD	LCSD			%Rec.	RPD	
Analyte				Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD Limit
Total Dissolved Solids				1000	1087		mg/L		109	80 - 120	1 10

QC Association Summary

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

Job ID: 880-9162-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 34093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total/NA	Water	8260C	
MB 860-34093/8	Method Blank	Total/NA	Water	8260C	
LCS 860-34093/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34093/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 33512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total/NA	Water	300.0	
MB 860-33512/3	Method Blank	Total/NA	Water	300.0	
MB 860-33512/68	Method Blank	Total/NA	Water	300.0	
LCS 860-33512/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-33512/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33512/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-33512/70	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 33513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total/NA	Water	300.0	
MB 860-33513/3	Method Blank	Total/NA	Water	300.0	
MB 860-33513/68	Method Blank	Total/NA	Water	300.0	
LCS 860-33513/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-33513/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33513/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-33513/70	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 34100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-34100/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-34100/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-34100/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	

Analysis Batch: 34324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	34100
880-9162-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	34100
MB 860-34100/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	34100
LCS 860-34100/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	34100
LCSD 860-34100/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	34100

General Chemistry

Analysis Batch: 34012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-34012/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-34012/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-34012/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

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QC Association Summary

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

Job ID: 880-9162-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 34086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-34086/39	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-34086/40	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-34086/41	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 34226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 34454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9162-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-9162-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9162-1

Date Collected: 12/08/21 08:31

Matrix: Water

Date Received: 12/08/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	34093	12/14/21 15:39	TTD	XEN STF
Total/NA	Analysis	300.0		1	33512	12/09/21 14:39	WP	XEN STF
Total/NA	Analysis	300.0		1	33513	12/09/21 14:39	WP	XEN STF
Total Recoverable	Prep	200.7			34100	12/14/21 09:00	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		1	34324	12/15/21 00:14	AV	XEN STF
Total Recoverable	Prep	200.7			34100	12/14/21 09:00	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		50	34324	12/15/21 00:36	AV	XEN STF
Total/NA	Analysis	SM 1030E		1	34454	12/15/21 17:58	AA	XEN STF
Total/NA	Analysis	SM 2320B		1	34086	12/13/21 19:37	YGG	XEN STF
Total/NA	Analysis	SM 2540C		1	34012	12/13/21 13:46	ADL	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	34226	12/14/21 15:35	TL	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 880-9162-1
SDG: Hobbs NM

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	SiO2
8260C		Water	Total BTEX
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 Hobb NM - 03B1417001

Job ID: 880-9162-1
SDG: Hobbs NM

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

Protocol References:

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

Laboratory References:

- XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-9162-1
SDG: Hobbs NM

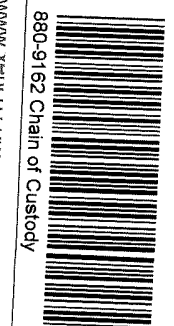
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9162-1	Levey Well	Water	12/08/21 08:31	12/08/21 16:47

- 1
- 2
- 3
- 4
- 5
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Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 505-3334
Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix AZ (480) 355-0900 Atlanta GA (770) 448-8800 Tampa FL (813)
735-392-7550



880-9162 Chain of Custody

Project Manager:	Beaux Jennings	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Wadley #210	Address:	
City, State ZIP:	Midland TX	City, State ZIP	
Phone:	210-219-8658	Email:	bjennings@ensolum.com

Work Order Comments
Program: UST/PST ☐ PRP ☐ Brownfields ☒ RRC ☐ Superfund ☐
State of Project: <i>MD, NY, CO</i>
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADAPT ☐ Other ☐

Project Name:	Levey Well Hobbs NM	ANALYSIS REQUEST										Work Order Notes
Project Number:	03B1417001	Turn Around										
		Routine ☐										
P.O. Number:	03B1417001	Rush 24 hr										
Sampler's Name	Aaron Marquez	Due Date										

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	44.7			Thermometer ID		
Received intact:	(es) No			IPB		
Cooler Custody Seals.	Yes No N/A			Correction Factor:	.10	
Sample Custody Seals.	Yes No N/A			Total Containers:		

Number of Containers

F, Cl, SO₄, B

: Ca, K, Mg, Na, Si

ty

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 TCLP / SPLP 6010	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 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 Xencio, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xencio 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 Xencio. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xencio, 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
		12/8/21 16:43			

CUSTODY SEAL



ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 12-8-2021

Signature: [Handwritten Signature]

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9162-1

SDG Number: Hobbs NM

Login Number: 9162

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9162-1

SDG Number: Hobbs NM

Login Number: 9162

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

List Creation: 12/09/21 11:19 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9444-1

Laboratory Sample Delivery Group: Hobbs NM

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

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

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

Authorized for release by:
1/4/2022 3:43:35 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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www.eurofinsus.com/Env

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

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

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

Laboratory Job ID: 880-9444-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-9444-1
SDG: Hobbs NM

Qualifiers

GC/MS VOA

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

HPLC/IC

Qualifier	Qualifier Description
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
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

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

Glossary

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

Definitions/Glossary

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

Job ID: 880-9444-1
SDG: Hobbs NM

Glossary (Continued)

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

- 1
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Case Narrative

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

Job ID: 880-9444-1
SDG: Hobbs NM

Job ID: 880-9444-1

Laboratory: Eurofins Xenco, Midland

Narrative	
	Job Narrative 880-9444-1

Receipt

The sample was received on 12/16/2021 3:21 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 1.6°C

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 860-34903 recovered outside control limits for the following analytes: 2,2-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 860-34903 were outside control limits: (880-9173-A-5 MS) and (880-9173-A-5 MSD).

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

HPLC/IC

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

Metals

Method 200.7: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-34919 and analytical batch 860-36383 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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: 880-9444-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9444-1

Date Collected: 12/16/21 08:00

Matrix: Water

Date Received: 12/16/21 15:21

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00323		0.00100	0.000214	mg/L		12/20/21 13:02	1
Bromobenzene	<0.000300	U	0.00100	0.000300	mg/L		12/20/21 13:02	1
Bromochloromethane	<0.000209	U	0.00100	0.000209	mg/L		12/20/21 13:02	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231	mg/L		12/20/21 13:02	1
Bromoform	<0.000630	U	0.00500	0.000630	mg/L		12/20/21 13:02	1
Bromomethane	<0.00105	U	0.00500	0.00105	mg/L		12/20/21 13:02	1
2-Butanone	<0.00270	U	0.0500	0.00270	mg/L		12/20/21 13:02	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L		12/20/21 13:02	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L		12/20/21 13:02	1
Chloroethane	<0.000433	U	0.0100	0.000433	mg/L		12/20/21 13:02	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L		12/20/21 13:02	1
Chloromethane	<0.000318	U	0.0100	0.000318	mg/L		12/20/21 13:02	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214	mg/L		12/20/21 13:02	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183	mg/L		12/20/21 13:02	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174	mg/L		12/20/21 13:02	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690	mg/L		12/20/21 13:02	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739	mg/L		12/20/21 13:02	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319	mg/L		12/20/21 13:02	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337	mg/L		12/20/21 13:02	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236	mg/L		12/20/21 13:02	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197	mg/L		12/20/21 13:02	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199	mg/L		12/20/21 13:02	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316	mg/L		12/20/21 13:02	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244	mg/L		12/20/21 13:02	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285	mg/L		12/20/21 13:02	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216	mg/L		12/20/21 13:02	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396	mg/L		12/20/21 13:02	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439	mg/L		12/20/21 13:02	1
2,2-Dichloropropane	<0.000360	U *	0.00500	0.000360	mg/L		12/20/21 13:02	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481	mg/L		12/20/21 13:02	1
Ethylbenzene	0.0140		0.00100	0.000515	mg/L		12/20/21 13:02	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200	mg/L		12/20/21 13:02	1
Isopropylbenzene	0.00678		0.00100	0.000161	mg/L		12/20/21 13:02	1
Methylene Chloride	<0.00191	U	0.00500	0.00191	mg/L		12/20/21 13:02	1
m,p-Xylenes	0.0535		0.0100	0.000330	mg/L		12/20/21 13:02	1
MTBE	<0.000571	U	0.00500	0.000571	mg/L		12/20/21 13:02	1
Naphthalene	<0.00200	U	0.0100	0.00200	mg/L		12/20/21 13:02	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286	mg/L		12/20/21 13:02	1
N-Propylbenzene	0.00392		0.00100	0.000179	mg/L		12/20/21 13:02	1
o-Xylene	0.00818		0.00100	0.000192	mg/L		12/20/21 13:02	1
p-Cymene (p-Isopropyltoluene)	0.000915	J	0.00100	0.000233	mg/L		12/20/21 13:02	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199	mg/L		12/20/21 13:02	1
Styrene	<0.000623	U	0.00100	0.000623	mg/L		12/20/21 13:02	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195	mg/L		12/20/21 13:02	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327	mg/L		12/20/21 13:02	1
1,1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284	mg/L		12/20/21 13:02	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L		12/20/21 13:02	1
Toluene	0.0261		0.00100	0.000500	mg/L		12/20/21 13:02	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256	mg/L		12/20/21 13:02	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-9444-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9444-1

Date Collected: 12/16/21 08:00

Matrix: Water

Date Received: 12/16/21 15:21

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/20/21 13:02	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 13:02	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 13:02	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/20/21 13:02	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/20/21 13:02	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/20/21 13:02	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/20/21 13:02	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/20/21 13:02	1
1,2,4-Trimethylbenzene	0.0309		0.00100	0.000252 mg/L			12/20/21 13:02	1
1,3,5-Trimethylbenzene	0.00899		0.00100	0.000279 mg/L			12/20/21 13:02	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/20/21 13:02	1
Xylenes, Total	0.0617		0.0100	0.000330 mg/L			12/20/21 13:02	1
Total BTEX	0.105		0.0100	0.00100 mg/L			12/20/21 13:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		74 - 124		12/20/21 13:02	1
Dibromofluoromethane (Surr)	104		75 - 131		12/20/21 13:02	1
1,2-Dichloroethane-d4 (Surr)	99		63 - 144		12/20/21 13:02	1
Toluene-d8 (Surr)	98		80 - 117		12/20/21 13:02	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.490	J	0.500	0.0711 mg/L			12/17/21 15:24	1
Nitrate as N	0.251		0.100	0.0391 mg/L			12/17/21 15:24	1
Chloride	228		0.500	0.200 mg/L			12/17/21 15:24	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/17/21 15:24	1
Fluoride	0.528		0.500	0.100 mg/L			12/17/21 15:24	1
Sulfate	42.1		0.500	0.109 mg/L			12/17/21 15:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	282	F1	10.0	1.47 mg/L		12/20/21 09:30	01/04/22 02:55	50
Magnesium	55.3		0.200	0.0500 mg/L		12/20/21 09:30	01/04/22 02:22	1
Potassium	4.13		0.500	0.107 mg/L		12/20/21 09:30	01/04/22 02:22	1
Sodium	81.9		0.500	0.0667 mg/L		12/20/21 09:30	01/04/22 02:22	1
SiO2	71.1		1.07	0.0781 mg/L		12/20/21 09:30	01/04/22 02:22	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	-0.883			%			01/04/22 13:19	1
Alkalinity	649		4.00	4.00 mg/L			12/17/21 18:45	1
Bicarbonate Alkalinity as CaCO3	649		4.00	4.00 mg/L			12/17/21 18:45	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/17/21 18:45	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			12/17/21 18:45	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			12/17/21 18:45	1
Total Dissolved Solids	1280		20.0	20.0 mg/L			12/20/21 10:29	1
pH	6.4	HF		SU			12/20/21 16:11	1
Temperature	18.3	HF		Celsius			12/20/21 16:11	1

Eurofins Xenco, Midland

Surrogate Summary

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

Job ID: 880-9444-1
SDG: Hobbs NM

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
880-9173-A-5 MS	Matrix Spike	99	111	102	98
880-9173-A-5 MSD	Matrix Spike Duplicate	105	110	101	97
880-9444-1	Levey Well	99	104	99	98
LCS 860-34903/3	Lab Control Sample	101	106	101	100
LCSD 860-34903/4	Lab Control Sample Dup	105	109	99	97
MB 860-34903/9	Method Blank	101	108	99	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

Job ID: 880-9444-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-34903/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34903

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/20/21 10:30	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/20/21 10:30	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/20/21 10:30	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/20/21 10:30	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/20/21 10:30	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/20/21 10:30	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/20/21 10:30	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/20/21 10:30	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/20/21 10:30	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/20/21 10:30	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/20/21 10:30	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/20/21 10:30	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/20/21 10:30	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/20/21 10:30	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/20/21 10:30	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/20/21 10:30	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/20/21 10:30	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/20/21 10:30	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/20/21 10:30	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/20/21 10:30	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/20/21 10:30	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 10:30	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/20/21 10:30	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/20/21 10:30	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/20/21 10:30	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/20/21 10:30	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/20/21 10:30	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/20/21 10:30	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/20/21 10:30	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/20/21 10:30	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/20/21 10:30	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:30	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/20/21 10:30	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/20/21 10:30	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 10:30	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/20/21 10:30	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/20/21 10:30	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/20/21 10:30	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/20/21 10:30	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/20/21 10:30	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/20/21 10:30	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 10:30	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/20/21 10:30	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/20/21 10:30	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/20/21 10:30	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/20/21 10:30	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 10:30	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 10:30	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9444-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-34903/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34903

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/20/21 10:30	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/20/21 10:30	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:30	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:30	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/20/21 10:30	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/20/21 10:30	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/20/21 10:30	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/20/21 10:30	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/20/21 10:30	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/20/21 10:30	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/20/21 10:30	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/20/21 10:30	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 10:30	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/20/21 10:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		12/20/21 10:30	1
Dibromofluoromethane (Surr)	108		75 - 131		12/20/21 10:30	1
1,2-Dichloroethane-d4 (Surr)	99		63 - 144		12/20/21 10:30	1
Toluene-d8 (Surr)	100		80 - 117		12/20/21 10:30	1

Lab Sample ID: LCS 860-34903/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34903

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05375		mg/L		107	66 - 142
Bromobenzene	0.0500	0.05292		mg/L		106	75 - 125
Bromochloromethane	0.0500	0.05378		mg/L		108	60 - 140
Bromodichloromethane	0.0500	0.05369		mg/L		107	75 - 125
Bromoform	0.0500	0.04538		mg/L		91	75 - 125
Bromomethane	0.0500	0.04849		mg/L		97	60 - 140
2-Butanone	0.250	0.2580		mg/L		103	60 - 140
Carbon tetrachloride	0.0500	0.05744		mg/L		115	62 - 125
Chlorobenzene	0.0500	0.05529		mg/L		111	60 - 133
Chloroethane	0.0500	0.04920		mg/L		98	60 - 140
Chloroform	0.0500	0.05631		mg/L		113	70 - 130
Chloromethane	0.0500	0.03835		mg/L		77	60 - 140
2-Chlorotoluene	0.0500	0.05593		mg/L		112	73 - 125
4-Chlorotoluene	0.0500	0.05519		mg/L		110	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04915		mg/L		98	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05300		mg/L		106	74 - 125
Dibromochloromethane	0.0500	0.04703		mg/L		94	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04654		mg/L		93	59 - 125
1,2-Dibromoethane	0.0500	0.04883		mg/L		98	73 - 125
1,2-Dichlorobenzene	0.0500	0.05534		mg/L		111	75 - 125
1,3-Dichlorobenzene	0.0500	0.05496		mg/L		110	75 - 125
1,4-Dichlorobenzene	0.0500	0.05593		mg/L		112	75 - 125

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QC Sample Results

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

Job ID: 880-9444-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-34903/4

Matrix: Water

Analysis Batch: 34903

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	0.05570		mg/L		111	66 - 142	4	25
Bromobenzene	0.0500	0.05569		mg/L		111	75 - 125	5	25
Bromochloromethane	0.0500	0.05849		mg/L		117	60 - 140	8	25
Bromodichloromethane	0.0500	0.05443		mg/L		109	75 - 125	1	25
Bromoform	0.0500	0.04759		mg/L		95	75 - 125	5	25
Bromomethane	0.0500	0.05218		mg/L		104	60 - 140	7	25
2-Butanone	0.250	0.2503		mg/L		100	60 - 140	3	25
Carbon tetrachloride	0.0500	0.06076		mg/L		122	62 - 125	6	25
Chlorobenzene	0.0500	0.05585		mg/L		112	60 - 133	1	25
Chloroethane	0.0500	0.05522		mg/L		110	60 - 140	12	25
Chloroform	0.0500	0.06041		mg/L		121	70 - 130	7	25
Chloromethane	0.0500	0.04088		mg/L		82	60 - 140	6	25
2-Chlorotoluene	0.0500	0.06004		mg/L		120	73 - 125	7	25
4-Chlorotoluene	0.0500	0.05783		mg/L		116	74 - 125	5	25
cis-1,2-Dichloroethene	0.0500	0.05219		mg/L		104	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.05585		mg/L		112	74 - 125	5	25
Dibromochloromethane	0.0500	0.04804		mg/L		96	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04917		mg/L		98	59 - 125	6	25
1,2-Dibromoethane	0.0500	0.04709		mg/L		94	73 - 125	4	25
1,2-Dichlorobenzene	0.0500	0.05823		mg/L		116	75 - 125	5	25
1,3-Dichlorobenzene	0.0500	0.05924		mg/L		118	75 - 125	7	25
1,4-Dichlorobenzene	0.0500	0.05801		mg/L		116	75 - 125	4	25
Dichlorodifluoromethane	0.0500	0.04296		mg/L		86	70 - 130	1	25
1,1-Dichloroethane	0.0500	0.05574		mg/L		111	72 - 125	6	25
1,2-Dichloroethane	0.0500	0.05459		mg/L		109	68 - 127	1	25
1,1-Dichloroethene	0.0500	0.05305		mg/L		106	59 - 172	8	25
1,2-Dichloropropane	0.0500	0.05304		mg/L		106	74 - 125	0	25
1,3-Dichloropropane	0.0500	0.05325		mg/L		106	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.06634	*+	mg/L		133	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.06022		mg/L		120	75 - 125	7	25
Ethylbenzene	0.0500	0.05755		mg/L		115	75 - 125	4	25
Hexachlorobutadiene	0.0500	0.05734		mg/L		115	75 - 125	10	25
Isopropylbenzene	0.0500	0.05740		mg/L		115	75 - 125	3	25
Methylene Chloride	0.0500	0.05094		mg/L		102	75 - 125	2	25
m,p-Xylenes	0.0500	0.05687		mg/L		114	75 - 125	2	25
MTBE	0.0500	0.05628		mg/L		113	65 - 135	6	25
Naphthalene	0.0500	0.05597		mg/L		112	70 - 130	15	25
n-Butylbenzene	0.0500	0.06235		mg/L		125	75 - 125	7	25
N-Propylbenzene	0.0500	0.06001		mg/L		120	75 - 125	6	25
o-Xylene	0.0500	0.05634		mg/L		113	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.06066		mg/L		121	75 - 125	5	25
sec-Butylbenzene	0.0500	0.06030		mg/L		121	75 - 125	6	25
Styrene	0.0500	0.05105		mg/L		102	75 - 125	2	25
tert-Butylbenzene	0.0500	0.06083		mg/L		122	75 - 125	8	25
1,1,1,2-Tetrachloroethane	0.0500	0.05066		mg/L		101	72 - 125	2	25
1,1,2,2-Tetrachloroethane	0.0500	0.05431		mg/L		109	74 - 125	9	25
Tetrachloroethene	0.0500	0.05620		mg/L		112	71 - 125	2	25
Toluene	0.0500	0.05625		mg/L		112	59 - 139	3	25

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QC Sample Results

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

Job ID: 880-9444-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-34903/4

Matrix: Water

Analysis Batch: 34903

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	0.05287		mg/L		106	75 - 125	5	25
trans-1,3-Dichloropropene	0.0500	0.05503		mg/L		110	66 - 125	7	25
1,2,3-Trichlorobenzene	0.0500	0.05128		mg/L		103	75 - 137	8	25
1,2,4-Trichlorobenzene	0.0500	0.04925		mg/L		98	75 - 135	11	25
1,1,1-Trichloroethane	0.0500	0.06239		mg/L		125	75 - 125	6	25
1,1,2-Trichloroethane	0.0500	0.05313		mg/L		106	75 - 127	1	25
Trichloroethene	0.0500	0.05543		mg/L		111	62 - 137	4	25
Trichlorofluoromethane	0.0500	0.05856		mg/L		117	60 - 140	12	25
1,2,3-Trichloropropane	0.0500	0.05438		mg/L		109	75 - 125	8	25
1,2,4-Trimethylbenzene	0.0500	0.05927		mg/L		119	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.06110		mg/L		122	60 - 140	8	25
Vinyl chloride	0.0500	0.04774		mg/L		95	60 - 140	12	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		74 - 124
Dibromofluoromethane (Surr)	109		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-34707/3

Matrix: Water

Analysis Batch: 34707

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			12/17/21 06:01	1
Chloride	<0.200	U	0.500	0.200 mg/L			12/17/21 06:01	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/17/21 06:01	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/17/21 06:01	1

Lab Sample ID: LCS 860-34707/4

Matrix: Water

Analysis Batch: 34707

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	9.957		mg/L		100	90 - 110
Chloride	10.0	10.11		mg/L		101	90 - 110
Fluoride	10.0	10.22		mg/L		102	90 - 110
Sulfate	10.0	10.26		mg/L		103	90 - 110

Lab Sample ID: LCSD 860-34707/5

Matrix: Water

Analysis Batch: 34707

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	9.939		mg/L		99	90 - 110	0	20
Chloride	10.0	9.869		mg/L		99	90 - 110	2	20
Fluoride	10.0	10.20		mg/L		102	90 - 110	0	20

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QC Sample Results

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

Job ID: 880-9444-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-34707/5

Matrix: Water

Analysis Batch: 34707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.24		mg/L		102	90 - 110	0	20

Lab Sample ID: MB 860-34708/3

Matrix: Water

Analysis Batch: 34708

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			12/17/21 06:01	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/17/21 06:01	1

Lab Sample ID: LCS 860-34708/4

Matrix: Water

Analysis Batch: 34708

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	9.922		mg/L		99	80 - 120
Nitrite as N	5.00	5.095		mg/L		102	80 - 120

Lab Sample ID: LCSD 860-34708/5

Matrix: Water

Analysis Batch: 34708

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	9.904		mg/L		99	80 - 120	0	20
Nitrite as N	5.00	5.085		mg/L		102	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-34919/1-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 34919

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.0293	U	0.200	0.0293 mg/L		12/20/21 09:30	01/04/22 02:11	1
Magnesium	<0.0500	U	0.200	0.0500 mg/L		12/20/21 09:30	01/04/22 02:11	1
Potassium	<0.107	U	0.500	0.107 mg/L		12/20/21 09:30	01/04/22 02:11	1
Sodium	<0.0667	U	0.500	0.0667 mg/L		12/20/21 09:30	01/04/22 02:11	1
SiO2	<0.0781	U	1.07	0.0781 mg/L		12/20/21 09:30	01/04/22 02:11	1

Lab Sample ID: LCS 860-34919/2-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 34919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	25.0	27.05		mg/L		108	85 - 115
Magnesium	25.0	26.40		mg/L		106	85 - 115
Potassium	10.0	10.73		mg/L		107	85 - 115
Sodium	25.0	26.67		mg/L		107	85 - 115
SiO2	21.4	24.45		mg/L		114	85 - 115

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9444-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-34919/3-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 34919

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limits
							Limits		
Calcium	25.0	27.08		mg/L		108	85 - 115	0	20
Magnesium	25.0	26.43		mg/L		106	85 - 115	0	20
Potassium	10.0	10.75		mg/L		108	85 - 115	0	20
Sodium	25.0	26.69		mg/L		107	85 - 115	0	20
SiO2	21.4	24.60		mg/L		115	85 - 115	1	20

Lab Sample ID: 880-9444-1 MS

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 34919

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.		
	Result	Qualifier	Added	Result	Qualifier				Limits		
Calcium	282	F1	25.0	290.4	E F1	mg/L		1139	70 - 130		
Magnesium	56.7	F1	25.0	79.64	F1	mg/L		314	70 - 130		
Potassium	12.0	J F1	10.0	14.92	F1	mg/L		147	70 - 130		
Sodium	247	F1 ^2	25.0	106.0	F1	mg/L		404	70 - 130		
SiO2	70.5	F1	21.4	94.95	F1	mg/L		437	70 - 130		

Lab Sample ID: 880-9444-1 MSD

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 34919

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Calcium	282	F1	25.0	290.6	E F1	mg/L		1140	70 - 130	0	20
Magnesium	56.7	F1	25.0	79.63	F1	mg/L		314	70 - 130	0	20
Potassium	12.0	J F1	10.0	14.96	F1	mg/L		147	70 - 130	0	20
Sodium	247	F1 ^2	25.0	106.6	F1	mg/L		407	70 - 130	1	20
SiO2	70.5	F1	21.4	94.34	F1	mg/L		434	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-34949/4

Matrix: Water

Analysis Batch: 34949

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			12/17/21 12:11	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/17/21 12:11	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/17/21 12:11	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			12/17/21 12:11	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			12/17/21 12:11	1

Lab Sample ID: LCS 860-34949/5

Matrix: Water

Analysis Batch: 34949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	
Alkalinity	250	233.5		mg/L		93	85 - 115	

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9444-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-34949/6

Matrix: Water

Analysis Batch: 34949

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	250	239.6		mg/L		96	85 - 115	3	20

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

Lab Sample ID: MB 860-34941/1

Matrix: Water

Analysis Batch: 34941

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			12/20/21 10:29	1

Lab Sample ID: LCS 860-34941/2

Matrix: Water

Analysis Batch: 34941

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD
Total Dissolved Solids	1000	1104		mg/L		110	80 - 120	

Lab Sample ID: LCSD 860-34941/3

Matrix: Water

Analysis Batch: 34941

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	1096		mg/L		110	80 - 120	1	10

Lab Sample ID: 880-9444-1 DU

Matrix: Water

Analysis Batch: 34941

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1280		1278		mg/L		0	10

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-9444-1 DU

Matrix: Water

Analysis Batch: 35024

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.4	HF	6.5		SU		0.8	20
Temperature	18.3	HF	18.0		Celsius		2	20

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-9444-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 34903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total/NA	Water	8260C	
MB 860-34903/9	Method Blank	Total/NA	Water	8260C	
LCS 860-34903/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34903/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 34707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total/NA	Water	300.0	
MB 860-34707/3	Method Blank	Total/NA	Water	300.0	
LCS 860-34707/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-34707/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 34708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total/NA	Water	300.0	
MB 860-34708/3	Method Blank	Total/NA	Water	300.0	
LCS 860-34708/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-34708/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 34919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-34919/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-34919/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-34919/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
880-9444-1 MS	Levey Well	Total Recoverable	Water	200.7	
880-9444-1 MSD	Levey Well	Total Recoverable	Water	200.7	

Analysis Batch: 36383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	34919
880-9444-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	34919
MB 860-34919/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	34919
LCS 860-34919/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	34919
LCSD 860-34919/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	34919
880-9444-1 MS	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	34919
880-9444-1 MSD	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	34919

General Chemistry

Analysis Batch: 34941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-34941/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-34941/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-34941/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
880-9444-1 DU	Levey Well	Total/NA	Water	SM 2540C	

Eurofins Xenco, Midland

QC Association Summary

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

Job ID: 880-9444-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 34949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-34949/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-34949/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-34949/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 35024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total/NA	Water	SM 4500 H+ B	
880-9444-1 DU	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 36411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9444-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-9444-1
SDG: Hobbs NM

Client Sample ID: Levey Well Lab Sample ID: 880-9444-1
Date Collected: 12/16/21 08:00 Matrix: Water
Date Received: 12/16/21 15:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	34903	12/20/21 13:02	NA	XEN STF
Total/NA	Analysis	300.0		1	34707	12/17/21 15:24	WP	XEN STF
Total/NA	Analysis	300.0		1	34708	12/17/21 15:24	WP	XEN STF
Total Recoverable	Prep	200.7			34919	12/20/21 09:30	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		1	36383	01/04/22 02:22	AV	XEN STF
Total Recoverable	Prep	200.7			34919	12/20/21 09:30	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		50	36383	01/04/22 02:55	AV	XEN STF
Total/NA	Analysis	SM 1030E		1	36411	01/04/22 13:19	AA	XEN STF
Total/NA	Analysis	SM 2320B		1	34949	12/17/21 18:45	YGG	XEN STF
Total/NA	Analysis	SM 2540C		1	34941	12/20/21 10:29	ADL	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	35024	12/20/21 16:11	TL	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 880-9444-1
SDG: Hobbs NM

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	SiO2
8260C		Water	Total BTEX
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 Hobb NM - 03B1417001

Job ID: 880-9444-1
SDG: Hobbs NM

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

Protocol References:

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

Laboratory References:

- XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

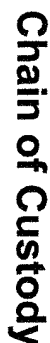
Sample Summary

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

Job ID: 880-9444-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9444-1	Levey Well	Water	12/16/21 08:00	12/16/21 15:21

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880-9444 Chain of Custody

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1/4/2022

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☒ SRC ☐ Superfund ☐

State of Project: *New Mexico*

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

Deliverables. EDD ☐ ADAPT ☐ Other ☐

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:	Aaron Marquez		Due Date							

SAMPLE RECEIPT		Temp Blank		Wet Ice:	
		Yes	No	Yes	No
Temperature (°C):	1.5				
Received Intact:	(Yes) No				
Cooler Custody Seals:	Yes No				
Sample Custody Seals:	Yes No				

Thermometer ID: 156148

Correction Factor: .10

Total Containers: 1

Number of Containers: 1

F, Cl, SO₄, B

Ca, K, Mg, Na, Si

Lab. ID: 156148

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

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number	VOCs	Anions:	Cations	pH	Alkalinity	TDS	Sample Comments	
Levey Well		W	12-16-21	08:55	-	7	X	X	X	X	X	X	24 hr	

[illegible]

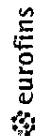
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xencio, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xencio will be liable only for the cost of samples and shall not assume any responsibility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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		12/10/14 15:24			

Eurofins Xenco, Midland

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Lab PM: Kramer Jessica	Carrier Tracking No(s): 880-3426-1
Client Contact: Shipping/Receiving		E-Mail: jessica.kramer@eurofinset.com	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas	Job #: 880-9444-1
Address: 4145 Greenbriar Dr		Preservation Codes: A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Anchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA Other	
City: Stafford		Analysis Requested	
State, Zip: TX, 77477		Total Number of Containers: 1	
Phone: 281-240-4200(Tel)		Callion, Antion (MOD) Copy Analytes	
Email: 281-240-4200(Tel)		2220B/ Alkalinity	
Project Name: Levey Well Hobb NM 03B1417001		2540C, Calc'd TDS	
Site: Levey Well (880-9444-1)		SM4500, H+/- pH	
Sample Identification Client ID (Lab ID)		300_ORGFM/NO2, NO3	
Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	300_ORGFM, 20D/Br Cl, F, SO4
12/16/21	08:00 Mountain	Water	200_7/200_7_P_TR (MOD) Custom List
			8260C/5030C (MOD) Full List VOCs
			Matrix (W=Water, S=Soil, O=Other, B=Other, A=Air)
			Special Instructions/Note:
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.			
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV Other (specify) _____ Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <i>Shirley Rodriguez</i> Date/Time: _____ Relinquished by: <i>Greyhound</i> Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seals Intact: _____ Δ Yes Δ No			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QC Requirements:			
Method of Shipment: Received by: <i>Greyhound</i> Date/Time: _____ Received by: <i>Greyhound</i> Date/Time: 12/17/2021 16:20 Received by: <i>Greyhound</i> Date/Time: _____ Temp: 2.0 IR ID: HOU-223 C/F: +0.0 Corrected Temp: 2.0			

Ver 06/08/2021

**Environment Testing
America**

Corrected temp. 2.0
 06/08/2021
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Eurofins Xenco, Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

 eurofins

**Environment Testing
America**

Client Information (Sub Contract Lab)				Lab P/N:		Carrier Tracking No(s):		COC No:	
Client Contact:				Kramer Jessica		880-3436-1		880-3436-1	
Shipping/Receiving				E-Mail:		State of Origin:		Page 1 of 1	
Company:				Jessica.Kramer@eurofins.com		Texas			
Address:				NELAP Texas		Job #:		880-9436-1	
City:				Stafford		Accreditations Required (See note):		Preservation Codes:	
State, Zip:				TX, 77477		Due Date Requested:		A HCL M Hexane	
Phone:				281-240-4200(Tel)		TAT Requested (days):		B NaOH N None	
Email:						PO #:		C Zn Acetate O AsNaO2	
Project Name:				Mungalo-Lankford Brandt 6"		WO #:		D Nitric Acid P Na2OAS	
Site:						Project #:		E NaHSO4 Q Na2SO3	
						SSOW#:		F MeOH R Na2S2O3	
						Sample Date:		G Amchlor S H2SO4	
						Sample Time:		H Ascorbic Acid T TSP Dodecylhydrate	
						Sample Type (C=Comp, G=grab):		I Ice U Acetone	
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):		J DI Water V MCAA	
						Sample Date:		K EDTA W pH 4.5	
						Sample Time:		L EDA Z other (specify)	
						Sample Type (C=Comp, G=grab):		Other:	
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			
						Sample Date:			
						Sample Time:			
						Sample Type (C=Comp, G=grab):			
						Matrix (In-water, S=acid, C=neutral, BT=Trace, Anal):			

1205/80/90 J

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**Environment Testing
America**

[illegible]

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

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)					
Sampler	Lab PM:	Kramer Jessica	Carter Tracking No(s):	GOC No:	880-3421 1
Phone:	E-Mail:	Jessica.kramer@eurofinset.com	State of Origin:	Page:	Page 1 of 1
Accreditations Required (See note): NELAP Texas			Job #: 880-9335-1		
Due Date Requested: 12/19/2021 TAT Requested (days):			Analysis Requested		
City:	Address:	PO #:	WO #:	Project #:	SSOW#:
Stafford	4145 Greenbriar Dr			88000039	
State, Zip:	Phone:	Email:	Project Name:	Eleanor 2-1 D	Site:
TX, 77477	281-240-4200(Tel)				
Sample Identification Client ID (Lab ID)			SW-1 (880-9335-1)		
Sample Date	Sample Time	Sample Type (C=Comp, G=grab) (ST-TIME, A-M)	Matrix (W-water, S-solid, O-oil, M-mud, A-air)	Special Instructions/Note:	
12/14/21	10:00 Central	Solid			
Preservation Codes			Other:		
A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Anchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA M Hexane N None O ASNaO2 P Na2OAS Q Na2SO3 R Na2S2O3 S H2SO4 T TSP Dodecalhydrate U Acetone V MCAA W pH 4-5 Z other (specify)					
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.					
Possible Hazard Identification			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months		
Unconfirmed Deliverable Requested: I II III IV Other (specify)			Primary Deliverable Rank: 2		
Empty Kit Relinquished by:			Date:		
Relinquished by: <i>Alicia Redenberry</i>			Company: Greyhound		
Relinquished by: <i>P. Palmer</i>			Company: Greyhound		
Relinquished by: Greyhound			Company: Greyhound		
Custody Seal Intact: ☒ Yes ☐ No			Temp: 2.0 IR ID:HOU-223 Cooler Temperature(s) °C and Other Remarks: C/F +0.0		

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

Chain of Custody Record

 eurofins

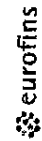
**Environment Testing
America**

Client Information (Sub Contract Lab)				Lab PM: Bulles, John		Carrier Tracking No(s): 880-3416-1		COC No: 880-3416-1	
Client Contact: Shipping/Receiving				E-Mail: john.bulles@eurofinet.com		State of Origin: Texas		Page: Page 1 of 1	
Company: Eurofins Xenco				Accreditations Required (See note): NELAP - Texas		Job #: 880-9408-1		Job #: 880-9408-1	
Address: 4145 Greenbriar Dr City: Stafford State, Zip: TX, 77477				Due Date Requested: 12/22/2021		TAT Requested (days):		Preservation Codes: A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Anchlor S H2SO4 H Ascorbic Acid T TSP Dodecalhydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify) Other	
Project Name: Antina				Project #: 88000674		PO #:		WO #:	
Site:				SSON#:					

Sample Identification	Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (If water, Swab, Quesadilla, etc.)	Preservation Code	300_ORGFM_28D/300_Prep (MCD) Custom List	5010C/3051A RCRA B + Cations (excl Hg)	7471A/7471A_Prep	6260C/6035FP Calc BTEX	8270D_SIM/3546	Special Instructions/Note:
CTB-2 MW-1 5' (880-9408-1)		12/14/21	15:09 Central	Solid			X	X	X	X	X	
CTB-2 MW-1 10' (880-9408-2)		12/14/21	15:19 Central	Solid			X	X	X	X	X	
CTB-2 MW-1 15' (880-9408-3)		12/14/21	15:29 Central	Solid			X	X	X	X	X	
CTB-2 MW-1 20' (880-9408-4)		12/14/21	15:38 Central	Solid			X	X	X	X	X	
CTB-2 MW-1 52' (880-9408-5)		12/15/21	11:17 Central	Solid			X	X	X	X	X	

Possible Hazard Identification			
Unconfirmed			
Deliverable Requested: I, II, III, IV Other (specify)			
Primary Deliverable Rank: 2			
Date:			
Time:			
Company:			
Received by:			
Date/Time:			
Company:			
Received by:			
Date/Time:			
Company:			
Received by:			
Date/Time:			
Company:			
Temp 2.0 IR ID:HOU-223			
C/F +0.0			
Corrected Temp: 2.0			

Chain of Custody Record

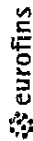
Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab Pkt:	Carrier Tracking No(s):	COC No:
Client Contact:		Kramer, Jessica	880-3416-1		
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:
Company:			jessica.kramer@eurofins.com	Texas	Page 1 of 1
Eurofins Xenco		Accreditations Required (See note):			
Address:		NELAP Texas			
City:		Job #:			
State, Zip:		880-9425-1			
Phone:		Preservation Codes:			
Email:		A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2SO3 G Anchor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify) Other			
Project Name:		Analysis Requested			
Site:		TX 1005/TX 1005, 9 Prep Standard Lot 7470A/1311 TT_Hg 6010B/1311 TT_MRCRA 8 1010_Calc 90450/DI_LEACH_NP PH TX 1005_Calc Total BTEX 8280C/6036FP_Calc BTEX			
Sample Identification - Client ID (Lab ID)		Special Instructions/Note:			
Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Composite)	Total Number of Samples	
12/16/21	11:20 Central	Solid		PP1216D-01 (880-9425-1)	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I, II, III, IV Other (specify)					
Primary Deliverable Rank: 2					
Empty Kit Relinquished by:					
Relinquished by: <i>[Signature]</i>					
Relinquished by: <i>[Signature]</i>					
Relinquished by: <i>[Signature]</i>					
Custody Seals Intact: <i>[Signature]</i>					
Custody Seal No. <i>[Signature]</i>					
Cooler Temperature(s) °C and Other Remarks: Temp: 20 C/F +0.0					
Corrected Temp 2.0					
06/08/2021					

Eurofins Xenco, Midland

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

Chain of Custody Record

Environment Testing
America

Client Information (Sub Contract Lab)		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact:		Phone:		Builes, John				880-3416.1	
Shipping/Receiving		E-Mail:		john.builes@eurofins.com		State of Origin:		Page:	
Company:				NELAP Texas		Texas		Page 1 of 1	
Eurofins Xenco		Address:		Due Date Requested:		Job #:		Preservation Codes:	
4145 Greenbriar Dr		City:		12/21/2021		880-9357 1		A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Ascorbic Acid H Iodine J DI Water K EDTA L EDA Other	
Stafford		State, Zip:		TAT Requested (days):				M. Hexane N. None O. AsH2O2 P. Na2O4S Q. Na2SO3 R. Na2SO4 S. H2SO4 T. TSP Dodecahydrate U. Acetone V. MCAA W. pH 4-5 Z. other (specify)	
Phone:		PO #:							
Email:		WO #:							
Project Name:		Project #:							
Antina		88000674							
Site:		SSOW#:							

Sample Identification	Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wet/dry, Solid/Liquid, Composite, etc.)	Analysis Requested	Special Instructions/Note:
CTB-3 MW1 Surface (880-9357 1)		12/13/21	11:54 Central	Solid		300. ORGM, 28D/300 Prep (MOD) Custom List	
CTB-3 MW1 10' (880-9357-2)		12/13/21	12:01 Central	Solid		6010C/3051A RCRA 8 + Cations (excl Hg)	
CTB-3 MW1 20' (880-9357-3)		12/13/21	12:18 Central	Solid		7471A/7471A Prep	
CTB-3 MW1 52' (880-9357-4)		12/13/21	15:23 Central	Solid		8260C/5035FP Calc BTEX	
						8270D SIM/3548	
						Total BTEX	
						Total BTEX	

Note: Since laboratory accreditation is subject to change, Eurofins Xenco LLC places the ownership of method, analysis & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.

Possible Hazard Identification	
Unconfirmed	
Deliverable Requested: I II III IV Other (specify)	Primary Deliverable Rank: 2
Empty Kit Relinquished by:	Date:
Relinquished by: <i>Antonia Rodriguez</i>	Date/Time:
Relinquished by: <i>Antonia Rodriguez</i>	Date/Time:
Relinquished by: <i>Antonia Rodriguez</i>	Date/Time:
Custody Seals Intact: <i>Antonia Rodriguez</i>	Custody Seal No.:
A Yes Δ No	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Return To Client	Disposal By Lab
Special Instructions/QC Requirements:	Archive For Months
Method of Shipment:	Date/Time:
Received by: <i>Antonia Rodriguez</i>	Date/Time:
Received by: <i>Antonia Rodriguez</i>	Date/Time:
Received by: <i>Antonia Rodriguez</i>	Date/Time:
Cooler Temperature(s) °C and Other Remarks:	Temp: 2.0 IR ID: HOU-223
Corrected Temp: 2.0	06/08/2021

Chain of Custody Record

 eurofins

**Environment Testing
America**

[illegible]

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

Chain of Custody Record

 eurofins

**Environment Testing
America**

[illegible]



Client Information (Sub Contract Lab)

Client Contact:	Phone:	E-Mail:	State of Origin:	Page:
Shipping/Receiving		holly.taylor@eurofinset.com	Texas	Page 1 of 1

Company:	Eurolins Xenco
Address:	NELAP Texas
Job #:	880-9474-1

Address:	4145 Greenbriar Dr	Due Date Requested:	12/26/2021	Analysis Requested	Preservation Codes:
City:					
State:				A	H/C
Zip:				M	Moons

[illegible]

TX, 77477	PO #:	
Phone:		
		D Nitric Acid P Na2O4S Q Na2SO3 R Na2S2O3 F MeOH E NaHSO4 NaHSO4

[illegible]

Project Name:	Project #:	DI Water MCAA EDTA pH 4.5

Site:	SSOW#:	88000187	NP pH FRA 8 (4) leachery P VOCs P SVOCs	L EVA Other: Z other (specify)

	Sample	Matrix
Live/7.9.0		
live/cn/m		
EACH		
T M R G		
T H g N		
Z T C L		
T T C L		

[illegible]

Sample ID	Sample Date	Time	G-grab	Compressed	ET (hours, sec)	Pressure (psi)	Special Instructions/Note:
9012							
9034							
1010							
9045							
6010							
7470							
8260							
8270							

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current in date, return the signed "Chain of Custody" certificate to the Eurofins Xenco LLC laboratory.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV Other (specify)	Primary Deliverable Rank: 2 Special Instructions (NCR Remediations):

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by:	Date/Time:	Received by:	Date/Time:	Company
<i>Johnston</i>		<i>Johnston</i>		

Requisitioned by:	Company	Received by:	Company
Date/Time:		Date/Time:	
17/11/2021 12:12		17/11/2021 12:12	
EX		EX	

[illegible]

Custody Seals Intact Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:	Temp. 2.0 C/F +0.0	IR ID: HOU-223

Corrected Temp: 2.0
Ver 06/08/2021

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9444-1

SDG Number: Hobbs NM

Login Number: 9444

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9444-1

SDG Number: Hobbs NM

Login Number: 9444

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

List Creation: 12/17/21 10:36 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9649-1

Laboratory Sample Delivery Group: Hobbs NM

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

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

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

Authorized for release by:
1/7/2022 7:06:36 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

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

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

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

Laboratory Job ID: 880-9649-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-9649-1
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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

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

Glossary

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

Definitions/Glossary

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

Job ID: 880-9649-1
SDG: Hobbs NM

Glossary (Continued)

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

- 1
- 2
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Case Narrative

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

Job ID: 880-9649-1
SDG: Hobbs NM

Job ID: 880-9649-1

Laboratory: Eurofins Xenco

Narrative	
	Job Narrative 880-9649-1

Receipt

The sample was received on 12/22/2021 2:27 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 10.1°C

GC/MS VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 860-35445 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 860-35446 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Metals

Method 200.7: Due to the high concentration of calcium and magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-36229 and analytical batch 860-36383 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

General Chemistry

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

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Client Sample Results

Client: Ensolum

Job ID: 880-9649-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9649-1

Date Collected: 12/22/21 08:34

Matrix: Water

Date Received: 12/22/21 14:27

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00289		0.00100	0.000214	mg/L		12/27/21 12:38	1
Bromobenzene	<0.000300	U	0.00100	0.000300	mg/L		12/27/21 12:38	1
Bromochloromethane	<0.000209	U	0.00100	0.000209	mg/L		12/27/21 12:38	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231	mg/L		12/27/21 12:38	1
Bromoform	<0.000630	U	0.00500	0.000630	mg/L		12/27/21 12:38	1
Bromomethane	<0.00105	U	0.00500	0.00105	mg/L		12/27/21 12:38	1
2-Butanone	0.00428	J	0.0500	0.00270	mg/L		12/27/21 12:38	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L		12/27/21 12:38	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L		12/27/21 12:38	1
Chloroethane	<0.000433	U	0.0100	0.000433	mg/L		12/27/21 12:38	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L		12/27/21 12:38	1
Chloromethane	<0.000318	U	0.0100	0.000318	mg/L		12/27/21 12:38	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214	mg/L		12/27/21 12:38	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183	mg/L		12/27/21 12:38	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174	mg/L		12/27/21 12:38	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690	mg/L		12/27/21 12:38	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739	mg/L		12/27/21 12:38	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319	mg/L		12/27/21 12:38	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337	mg/L		12/27/21 12:38	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236	mg/L		12/27/21 12:38	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197	mg/L		12/27/21 12:38	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199	mg/L		12/27/21 12:38	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316	mg/L		12/27/21 12:38	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244	mg/L		12/27/21 12:38	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285	mg/L		12/27/21 12:38	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216	mg/L		12/27/21 12:38	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396	mg/L		12/27/21 12:38	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439	mg/L		12/27/21 12:38	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360	mg/L		12/27/21 12:38	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481	mg/L		12/27/21 12:38	1
Ethylbenzene	0.0105		0.00100	0.000515	mg/L		12/27/21 12:38	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200	mg/L		12/27/21 12:38	1
Isopropylbenzene	0.00508		0.00100	0.000161	mg/L		12/27/21 12:38	1
Methylene Chloride	<0.00191	U	0.00500	0.00191	mg/L		12/27/21 12:38	1
m,p-Xylenes	0.0408		0.0100	0.000330	mg/L		12/27/21 12:38	1
MTBE	<0.000571	U	0.00500	0.000571	mg/L		12/27/21 12:38	1
Naphthalene	<0.00200	U	0.0100	0.00200	mg/L		12/27/21 12:38	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286	mg/L		12/27/21 12:38	1
N-Propylbenzene	0.00279		0.00100	0.000179	mg/L		12/27/21 12:38	1
o-Xylene	0.00587		0.00100	0.000192	mg/L		12/27/21 12:38	1
p-Cymene (p-Isopropyltoluene)	0.000683	J	0.00100	0.000233	mg/L		12/27/21 12:38	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199	mg/L		12/27/21 12:38	1
Styrene	<0.000623	U	0.00100	0.000623	mg/L		12/27/21 12:38	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195	mg/L		12/27/21 12:38	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327	mg/L		12/27/21 12:38	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284	mg/L		12/27/21 12:38	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L		12/27/21 12:38	1
Toluene	0.0219		0.00100	0.000500	mg/L		12/27/21 12:38	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256	mg/L		12/27/21 12:38	1

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Client Sample Results

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

Job ID: 880-9649-1
SDG: Hobbs NM

Client Sample ID: Levey Well
Date Collected: 12/22/21 08:34
Date Received: 12/22/21 14:27

Lab Sample ID: 880-9649-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752	mg/L			12/27/21 12:38	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200	mg/L			12/27/21 12:38	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200	mg/L			12/27/21 12:38	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504	mg/L			12/27/21 12:38	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228	mg/L			12/27/21 12:38	1
Trichloroethene	<0.000424	U	0.00500	0.000424	mg/L			12/27/21 12:38	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245	mg/L			12/27/21 12:38	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283	mg/L			12/27/21 12:38	1
1,2,4-Trimethylbenzene	0.0183		0.00100	0.000252	mg/L			12/27/21 12:38	1
1,3,5-Trimethylbenzene	0.00553		0.00100	0.000279	mg/L			12/27/21 12:38	1
Vinyl chloride	<0.000234	U	0.00200	0.000234	mg/L			12/27/21 12:38	1
Xylenes, Total	0.0467		0.0100	0.000330	mg/L			12/27/21 12:38	1
Total BTEX	0.0819		0.0100	0.00100	mg/L			12/27/21 12:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		74 - 124					12/27/21 12:38	1
Dibromofluoromethane (Surr)	98		75 - 131					12/27/21 12:38	1
1,2-Dichloroethane-d4 (Surr)	94		63 - 144					12/27/21 12:38	1
Toluene-d8 (Surr)	101		80 - 117					12/27/21 12:38	1

Method: 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.480	J	0.500	0.0711	mg/L			12/23/21 14:57	1
Nitrate as N	0.223		0.100	0.0391	mg/L			12/23/21 14:57	1
Chloride	230		0.500	0.200	mg/L			12/23/21 14:57	1
Nitrite as N	<0.0293	U	0.100	0.0293	mg/L			12/23/21 14:57	1
Fluoride	0.294	J	0.500	0.100	mg/L			12/23/21 14:57	1
Sulfate	43.3		0.500	0.109	mg/L			12/23/21 14:57	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	304		10.0	1.47	mg/L		01/03/22 11:30	01/03/22 21:16	50
Magnesium	58.5		0.200	0.0500	mg/L		01/03/22 11:30	01/03/22 20:58	1
Potassium	4.66		0.500	0.107	mg/L		01/03/22 11:30	01/03/22 20:58	1
Sodium	85.8		0.500	0.0667	mg/L		01/03/22 11:30	01/03/22 20:58	1
SiO2	70.8		1.07	0.0781	mg/L		01/03/22 11:30	01/03/22 20:58	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	3.67				%			01/04/22 13:19	1
Alkalinity	619		4.00	4.00	mg/L			12/23/21 18:05	1
Bicarbonate Alkalinity as CaCO3	619		4.00	4.00	mg/L			12/23/21 18:05	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			12/23/21 18:05	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00	mg/L			12/23/21 18:05	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00	mg/L			12/23/21 18:05	1
Total Dissolved Solids	1270		20.0	20.0	mg/L			12/23/21 16:42	1
pH	6.4	HF			SU			12/27/21 17:03	1
Temperature	21.6	HF			Celsius			12/27/21 17:03	1

Surrogate Summary

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

Job ID: 880-9649-1
SDG: Hobbs NM

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
860-17881-F-1 MS	Matrix Spike	99	98	88	98
880-9649-1	Levey Well	99	98	94	101
LCS 860-35577/3	Lab Control Sample	101	99	88	99
LCSD 860-35577/4	Lab Control Sample Dup	100	99	88	98
MB 860-35577/9	Method Blank	101	101	93	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

Job ID: 880-9649-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-35577/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 35577

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/27/21 10:56	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/27/21 10:56	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/27/21 10:56	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/27/21 10:56	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/27/21 10:56	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/27/21 10:56	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/27/21 10:56	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/27/21 10:56	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/27/21 10:56	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/27/21 10:56	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/27/21 10:56	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/27/21 10:56	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/27/21 10:56	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/27/21 10:56	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/27/21 10:56	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/27/21 10:56	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/27/21 10:56	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/27/21 10:56	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/27/21 10:56	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/27/21 10:56	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/27/21 10:56	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/27/21 10:56	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/27/21 10:56	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/27/21 10:56	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/27/21 10:56	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/27/21 10:56	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/27/21 10:56	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/27/21 10:56	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/27/21 10:56	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/27/21 10:56	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/27/21 10:56	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 10:56	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/27/21 10:56	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/27/21 10:56	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/27/21 10:56	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/27/21 10:56	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/27/21 10:56	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/27/21 10:56	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/27/21 10:56	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/27/21 10:56	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/27/21 10:56	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/27/21 10:56	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/27/21 10:56	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/27/21 10:56	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/27/21 10:56	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/27/21 10:56	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/27/21 10:56	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/27/21 10:56	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9649-1

Project/Site: Levey Well Hobb NM - 03B1417001

SDG: Hobbs NM

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

Lab Sample ID: MB 860-35577/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 35577

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/27/21 10:56	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/27/21 10:56	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 10:56	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 10:56	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/27/21 10:56	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/27/21 10:56	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/27/21 10:56	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/27/21 10:56	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/27/21 10:56	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/27/21 10:56	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/27/21 10:56	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/27/21 10:56	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/27/21 10:56	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/27/21 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		12/27/21 10:56	1
Dibromofluoromethane (Surr)	101		75 - 131		12/27/21 10:56	1
1,2-Dichloroethane-d4 (Surr)	93		63 - 144		12/27/21 10:56	1
Toluene-d8 (Surr)	100		80 - 117		12/27/21 10:56	1

Lab Sample ID: LCS 860-35577/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 35577

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05451		mg/L		109	66 - 142
Bromobenzene	0.0500	0.05148		mg/L		103	75 - 125
Bromochloromethane	0.0500	0.05328		mg/L		107	60 - 140
Bromodichloromethane	0.0500	0.05063		mg/L		101	75 - 125
Bromoform	0.0500	0.05016		mg/L		100	75 - 125
Bromomethane	0.0500	0.05082		mg/L		102	60 - 140
2-Butanone	0.250	0.2383		mg/L		95	60 - 140
Carbon tetrachloride	0.0500	0.05417		mg/L		108	62 - 125
Chlorobenzene	0.0500	0.05231		mg/L		105	60 - 133
Chloroethane	0.0500	0.04841		mg/L		97	60 - 140
Chloroform	0.0500	0.05264		mg/L		105	70 - 130
Chloromethane	0.0500	0.05005		mg/L		100	60 - 140
2-Chlorotoluene	0.0500	0.05277		mg/L		106	73 - 125
4-Chlorotoluene	0.0500	0.05337		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05337		mg/L		107	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05349		mg/L		107	74 - 125
Dibromochloromethane	0.0500	0.05052		mg/L		101	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04720		mg/L		94	59 - 125
1,2-Dibromoethane	0.0500	0.04809		mg/L		96	73 - 125
1,2-Dichlorobenzene	0.0500	0.05219		mg/L		104	75 - 125
1,3-Dichlorobenzene	0.0500	0.05342		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05166		mg/L		103	75 - 125

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QC Sample Results

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

Job ID: 880-9649-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-35577/3

Matrix: Water

Analysis Batch: 35577

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.05333		mg/L		107	70 - 130
1,1-Dichloroethane	0.0500	0.05539		mg/L		111	72 - 125
1,2-Dichloroethane	0.0500	0.04584		mg/L		92	68 - 127
1,1-Dichloroethene	0.0500	0.05271		mg/L		105	59 - 172
1,2-Dichloropropane	0.0500	0.05348		mg/L		107	74 - 125
1,3-Dichloropropane	0.0500	0.04806		mg/L		96	75 - 125
2,2-Dichloropropane	0.0500	0.05789		mg/L		116	75 - 125
1,1-Dichloropropene	0.0500	0.05544		mg/L		111	75 - 125
Ethylbenzene	0.0500	0.05346		mg/L		107	75 - 125
Hexachlorobutadiene	0.0500	0.05426		mg/L		109	75 - 125
Isopropylbenzene	0.0500	0.04901		mg/L		98	75 - 125
Methylene Chloride	0.0500	0.05193		mg/L		104	75 - 125
m,p-Xylenes	0.0500	0.05348		mg/L		107	75 - 125
MTBE	0.0500	0.05044		mg/L		101	65 - 135
Naphthalene	0.0500	0.04828		mg/L		97	70 - 130
n-Butylbenzene	0.0500	0.05468		mg/L		109	75 - 125
N-Propylbenzene	0.0500	0.05540		mg/L		111	75 - 125
o-Xylene	0.0500	0.05266		mg/L		105	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05685		mg/L		114	75 - 125
sec-Butylbenzene	0.0500	0.05599		mg/L		112	75 - 125
Styrene	0.0500	0.05436		mg/L		109	75 - 125
tert-Butylbenzene	0.0500	0.05501		mg/L		110	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05212		mg/L		104	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04791		mg/L		96	74 - 125
Tetrachloroethene	0.0500	0.05354		mg/L		107	71 - 125
Toluene	0.0500	0.05268		mg/L		105	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05610		mg/L		112	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05039		mg/L		101	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05002		mg/L		100	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05079		mg/L		102	75 - 135
1,1,1-Trichloroethane	0.0500	0.05297		mg/L		106	75 - 125
1,1,2-Trichloroethane	0.0500	0.04913		mg/L		98	75 - 127
Trichloroethene	0.0500	0.05508		mg/L		110	62 - 137
Trichlorofluoromethane	0.0500	0.05404		mg/L		108	60 - 140
1,2,3-Trichloropropane	0.0500	0.04887		mg/L		98	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05579		mg/L		112	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05497		mg/L		110	60 - 140
Vinyl chloride	0.0500	0.05275		mg/L		106	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	88		63 - 144
Toluene-d8 (Surr)	99		80 - 117

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QC Sample Results

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

Job ID: 880-9649-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-35577/4

Matrix: Water

Analysis Batch: 35577

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
Benzene	0.0500	0.05040		mg/L		101	66 - 142	8	25
Bromobenzene	0.0500	0.05002		mg/L		100	75 - 125	3	25
Bromochloromethane	0.0500	0.05046		mg/L		101	60 - 140	5	25
Bromodichloromethane	0.0500	0.04789		mg/L		96	75 - 125	6	25
Bromoform	0.0500	0.05125		mg/L		103	75 - 125	2	25
Bromomethane	0.0500	0.04694		mg/L		94	60 - 140	8	25
2-Butanone	0.250	0.2614		mg/L		105	60 - 140	9	25
Carbon tetrachloride	0.0500	0.04858		mg/L		97	62 - 125	11	25
Chlorobenzene	0.0500	0.04925		mg/L		99	60 - 133	6	25
Chloroethane	0.0500	0.05011		mg/L		100	60 - 140	3	25
Chloroform	0.0500	0.04827		mg/L		97	70 - 130	9	25
Chloromethane	0.0500	0.05002		mg/L		100	60 - 140	0	25
2-Chlorotoluene	0.0500	0.04991		mg/L		100	73 - 125	6	25
4-Chlorotoluene	0.0500	0.05013		mg/L		100	74 - 125	6	25
cis-1,2-Dichloroethene	0.0500	0.04893		mg/L		98	75 - 125	9	25
cis-1,3-Dichloropropene	0.0500	0.05105		mg/L		102	74 - 125	5	25
Dibromochloromethane	0.0500	0.05005		mg/L		100	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05570		mg/L		111	59 - 125	17	25
1,2-Dibromoethane	0.0500	0.04888		mg/L		98	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05016		mg/L		100	75 - 125	4	25
1,3-Dichlorobenzene	0.0500	0.05095		mg/L		102	75 - 125	5	25
1,4-Dichlorobenzene	0.0500	0.04955		mg/L		99	75 - 125	4	25
Dichlorodifluoromethane	0.0500	0.05500		mg/L		110	70 - 130	3	25
1,1-Dichloroethane	0.0500	0.05061		mg/L		101	72 - 125	9	25
1,2-Dichloroethane	0.0500	0.04427		mg/L		89	68 - 127	3	25
1,1-Dichloroethene	0.0500	0.04701		mg/L		94	59 - 172	11	25
1,2-Dichloropropane	0.0500	0.05074		mg/L		101	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.04782		mg/L		96	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.05264		mg/L		105	75 - 125	9	25
1,1-Dichloropropene	0.0500	0.05060		mg/L		101	75 - 125	9	25
Ethylbenzene	0.0500	0.04995		mg/L		100	75 - 125	7	25
Hexachlorobutadiene	0.0500	0.05453		mg/L		109	75 - 125	0	25
Isopropylbenzene	0.0500	0.04600		mg/L		92	75 - 125	6	25
Methylene Chloride	0.0500	0.04797		mg/L		96	75 - 125	8	25
m,p-Xylenes	0.0500	0.04976		mg/L		100	75 - 125	7	25
MTBE	0.0500	0.05056		mg/L		101	65 - 135	0	25
Naphthalene	0.0500	0.05643		mg/L		113	70 - 130	16	25
n-Butylbenzene	0.0500	0.05199		mg/L		104	75 - 125	5	25
N-Propylbenzene	0.0500	0.05143		mg/L		103	75 - 125	7	25
o-Xylene	0.0500	0.05020		mg/L		100	75 - 125	5	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05332		mg/L		107	75 - 125	6	25
sec-Butylbenzene	0.0500	0.05324		mg/L		106	75 - 125	5	25
Styrene	0.0500	0.05156		mg/L		103	75 - 125	5	25
tert-Butylbenzene	0.0500	0.05111		mg/L		102	75 - 125	7	25
1,1,1,2-Tetrachloroethane	0.0500	0.04932		mg/L		99	72 - 125	6	25
1,1,2,2-Tetrachloroethane	0.0500	0.05047		mg/L		101	74 - 125	5	25
Tetrachloroethene	0.0500	0.04923		mg/L		98	71 - 125	8	25
Toluene	0.0500	0.04919		mg/L		98	59 - 139	7	25

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QC Sample Results

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

Job ID: 880-9649-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-35577/4

Matrix: Water

Analysis Batch: 35577

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
trans-1,2-Dichloroethene	0.0500	0.05096		mg/L		102	75 - 125	10		25
trans-1,3-Dichloropropene	0.0500	0.04882		mg/L		98	66 - 125	3		25
1,2,3-Trichlorobenzene	0.0500	0.05560		mg/L		111	75 - 137	11		25
1,2,4-Trichlorobenzene	0.0500	0.05274		mg/L		105	75 - 135	4		25
1,1,1-Trichloroethane	0.0500	0.04864		mg/L		97	75 - 125	9		25
1,1,2-Trichloroethane	0.0500	0.04944		mg/L		99	75 - 127	1		25
Trichloroethene	0.0500	0.05055		mg/L		101	62 - 137	9		25
Trichlorofluoromethane	0.0500	0.05464		mg/L		109	60 - 140	1		25
1,2,3-Trichloropropane	0.0500	0.05141		mg/L		103	75 - 125	5		25
1,2,4-Trimethylbenzene	0.0500	0.05230		mg/L		105	75 - 125	6		25
1,3,5-Trimethylbenzene	0.0500	0.05227		mg/L		105	60 - 140	5		25
Vinyl chloride	0.0500	0.05414		mg/L		108	60 - 140	3		25

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	88		63 - 144
Toluene-d8 (Surr)	98		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-35445/3

Matrix: Water

Analysis Batch: 35445

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Bromide	<0.0711	U	0.500	0.0711 mg/L			12/23/21 10:10	1
Chloride	<0.200	U	0.500	0.200 mg/L			12/23/21 10:10	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/23/21 10:10	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/23/21 10:10	1

Lab Sample ID: LCS 860-35445/4

Matrix: Water

Analysis Batch: 35445

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	RPD
Bromide	10.0	9.981		mg/L		100	90 - 110	
Chloride	10.0	10.18		mg/L		102	90 - 110	
Fluoride	10.0	10.26		mg/L		103	90 - 110	
Sulfate	10.0	9.900		mg/L		99	90 - 110	

Lab Sample ID: LCSD 860-35445/5

Matrix: Water

Analysis Batch: 35445

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Bromide	10.0	10.02		mg/L		100	90 - 110	0		20
Chloride	10.0	10.04		mg/L		100	90 - 110	1		20
Fluoride	10.0	10.29		mg/L		103	90 - 110	0		20

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QC Sample Results

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

Job ID: 880-9649-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-35445/5

Matrix: Water

Analysis Batch: 35445

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	9.922		mg/L		99	90 - 110	0	20

Lab Sample ID: MB 860-35446/3

Matrix: Water

Analysis Batch: 35446

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			12/23/21 10:10	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/23/21 10:10	1

Lab Sample ID: LCS 860-35446/4

Matrix: Water

Analysis Batch: 35446

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	9.978		mg/L		100	80 - 120
Nitrite as N	5.00	5.092		mg/L		102	80 - 120

Lab Sample ID: LCSD 860-35446/5

Matrix: Water

Analysis Batch: 35446

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	9.992		mg/L		100	80 - 120	0	20
Nitrite as N	5.00	5.115		mg/L		102	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-36229/1-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.0293	U	0.200	0.0293 mg/L		01/03/22 11:30	01/03/22 20:47	1
Magnesium	<0.0500	U	0.200	0.0500 mg/L		01/03/22 11:30	01/03/22 20:47	1
Potassium	<0.107	U	0.500	0.107 mg/L		01/03/22 11:30	01/03/22 20:47	1
Sodium	<0.0667	U	0.500	0.0667 mg/L		01/03/22 11:30	01/03/22 20:47	1
SiO2	<0.0781	U	1.07	0.0781 mg/L		01/03/22 11:30	01/03/22 20:47	1

Lab Sample ID: LCS 860-36229/2-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	25.0	25.33		mg/L		101	85 - 115
Magnesium	25.0	24.82		mg/L		99	85 - 115
Potassium	10.0	10.12		mg/L		101	85 - 115
Sodium	25.0	25.10		mg/L		100	85 - 115
SiO2	21.4	22.99		mg/L		107	85 - 115

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QC Sample Results

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

Job ID: 880-9649-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-36229/3-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	Limit
Calcium	25.0	25.38		mg/L		102	85 - 115	0	20
Magnesium	25.0	24.89		mg/L		100	85 - 115	0	20
Potassium	10.0	10.13		mg/L		101	85 - 115	0	20
Sodium	25.0	25.14		mg/L		101	85 - 115	0	20
SiO2	21.4	23.07		mg/L		108	85 - 115	0	20

Lab Sample ID: 880-9649-1 MS

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Calcium	295	E	25.0	315.6	E 4	mg/L		82	70 - 130	
Magnesium	58.5		25.0	83.10	E	mg/L		99	70 - 130	
Potassium	4.66		10.0	15.54		mg/L		109	70 - 130	
Sodium	85.8		25.0	111.0		mg/L		101	70 - 130	
SiO2	70.8		21.4	94.06		mg/L		109	70 - 130	

Lab Sample ID: 880-9649-1 MSD

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Levey Well

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Calcium	295	E	25.0	314.8	E 4	mg/L		78	70 - 130	0
Magnesium	58.5		25.0	82.81	E	mg/L		97	70 - 130	0
Potassium	4.66		10.0	15.52		mg/L		109	70 - 130	0
Sodium	85.8		25.0	110.6		mg/L		100	70 - 130	0
SiO2	70.8		21.4	94.19		mg/L		109	70 - 130	0

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-35622/17

Matrix: Water

Analysis Batch: 35622

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			12/23/21 15:41	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/23/21 15:41	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/23/21 15:41	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			12/23/21 15:41	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			12/23/21 15:41	1

Lab Sample ID: LCS 860-35622/18

Matrix: Water

Analysis Batch: 35622

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	RPD
Alkalinity	250	243.8		mg/L		98	85 - 115	

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QC Sample Results

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

Job ID: 880-9649-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-35622/19
Matrix: Water
Analysis Batch: 35622

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	248.9		mg/L		100	85 - 115	2	20

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

Lab Sample ID: MB 860-35545/1
Matrix: Water
Analysis Batch: 35545

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			12/23/21 16:42	1

Lab Sample ID: LCS 860-35545/2
Matrix: Water
Analysis Batch: 35545

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	1094		mg/L		109	80 - 120

Lab Sample ID: LCSD 860-35545/3
Matrix: Water
Analysis Batch: 35545

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	1065		mg/L		107	80 - 120	3	10

QC Association Summary

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

Job ID: 880-9649-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 35577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total/NA	Water	8260C	
MB 860-35577/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35577/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35577/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 35445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total/NA	Water	300.0	
MB 860-35445/3	Method Blank	Total/NA	Water	300.0	
LCS 860-35445/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-35445/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 35446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total/NA	Water	300.0	
MB 860-35446/3	Method Blank	Total/NA	Water	300.0	
LCS 860-35446/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-35446/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 36229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-36229/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-36229/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-36229/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	
880-9649-1 MS	Levey Well	Total Recoverable	Water	200.7	
880-9649-1 MSD	Levey Well	Total Recoverable	Water	200.7	

Analysis Batch: 36383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	36229
880-9649-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	36229
MB 860-36229/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	36229
LCS 860-36229/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	36229
LCSD 860-36229/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	36229
880-9649-1 MS	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	36229
880-9649-1 MSD	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	36229

General Chemistry

Analysis Batch: 35545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-35545/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-35545/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-35545/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

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QC Association Summary

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

Job ID: 880-9649-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 35622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-35622/17	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-35622/18	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-35622/19	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 35705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 36411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9649-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-9649-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9649-1

Date Collected: 12/22/21 08:34

Matrix: Water

Date Received: 12/22/21 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	35577	12/27/21 12:38	NA	XEN STF
Total/NA	Analysis	300.0		1	35445	12/23/21 14:57	ANP	XEN STF
Total/NA	Analysis	300.0		1	35446	12/23/21 14:57	ANP	XEN STF
Total Recoverable	Prep	200.7			36229	01/03/22 11:30	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		1	36383	01/03/22 20:58	AV	XEN STF
Total Recoverable	Prep	200.7			36229	01/03/22 11:30	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		50	36383	01/03/22 21:16	AV	XEN STF
Total/NA	Analysis	SM 1030E		1	36411	01/04/22 13:19	AA	XEN STF
Total/NA	Analysis	SM 2320B		1	35622	12/23/21 18:05	YGG	XEN STF
Total/NA	Analysis	SM 2540C		1	35545	12/23/21 16:42	ADL	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	35705	12/27/21 17:03	TL	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 880-9649-1
SDG: Hobbs NM

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	SiO2
8260C		Water	Total BTEX
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 Hobb NM - 03B1417001

Job ID: 880-9649-1
SDG: Hobbs NM

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

XEN STF = Eurofins Xenco, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-9649-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9649-1	Levey Well	Water	12/22/21 08:34	12/22/21 14:27

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Work

880-9649 Chain of Custody

1/7/2022

Work Order Comments

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

State of Project: *New Mexico*

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

Deliverables EDD ☐ ADAPT ☐ Other ☐

[illegible][illegible][illegible]

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

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
		12/22/21 14:19			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9649-1

SDG Number: Hobbs NM

Login Number: 9649

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	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: 880-9649-1

SDG Number: Hobbs NM

Login Number: 9649

List Number: 2

Creator: Milone, Jeancarlo

List Source: Eurofins Xenco

List Creation: 12/23/21 12:31 PM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9760-1

Laboratory Sample Delivery Group: Hobbs NM

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

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

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

Authorized for release by:
1/13/2022 8:21:14 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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www.eurofinsus.com/Env

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

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

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

Laboratory Job ID: 880-9760-1
SDG: Hobbs NM

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Definitions/Glossary

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

Job ID: 880-9760-1
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
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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 Hobb NM - 03B1417001

Job ID: 880-9760-1
SDG: Hobbs NM

Job ID: 880-9760-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-9760-1

Receipt

The sample was received on 12/29/2021 3:36 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 10.2°C

GC/MS VOA

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

HPLC/IC

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

Metals

Method 200.7: Due to the high concentration of calcium and magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-36229 and analytical batch 860-36383 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 200.7: Due to the high concentration of calcium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-36229 and analytical batch 860-36383 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

General Chemistry

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

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Client Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9760-1

Date Collected: 12/29/21 08:40

Matrix: Water

Date Received: 12/29/21 15:36

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00611		0.00100	0.000214	mg/L		01/03/22 13:04	1
Bromobenzene	<0.000300	U	0.00100	0.000300	mg/L		01/03/22 13:04	1
Bromochloromethane	<0.000209	U	0.00100	0.000209	mg/L		01/03/22 13:04	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231	mg/L		01/03/22 13:04	1
Bromoform	<0.000630	U	0.00500	0.000630	mg/L		01/03/22 13:04	1
Bromomethane	<0.00105	U	0.00500	0.00105	mg/L		01/03/22 13:04	1
2-Butanone	<0.00270	U	0.0500	0.00270	mg/L		01/03/22 13:04	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L		01/03/22 13:04	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L		01/03/22 13:04	1
Chloroethane	<0.000433	U	0.0100	0.000433	mg/L		01/03/22 13:04	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L		01/03/22 13:04	1
Chloromethane	<0.000318	U	0.0100	0.000318	mg/L		01/03/22 13:04	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214	mg/L		01/03/22 13:04	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183	mg/L		01/03/22 13:04	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174	mg/L		01/03/22 13:04	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690	mg/L		01/03/22 13:04	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739	mg/L		01/03/22 13:04	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319	mg/L		01/03/22 13:04	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337	mg/L		01/03/22 13:04	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236	mg/L		01/03/22 13:04	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197	mg/L		01/03/22 13:04	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199	mg/L		01/03/22 13:04	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316	mg/L		01/03/22 13:04	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244	mg/L		01/03/22 13:04	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285	mg/L		01/03/22 13:04	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216	mg/L		01/03/22 13:04	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396	mg/L		01/03/22 13:04	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439	mg/L		01/03/22 13:04	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360	mg/L		01/03/22 13:04	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481	mg/L		01/03/22 13:04	1
Ethylbenzene	0.0230		0.00100	0.000515	mg/L		01/03/22 13:04	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200	mg/L		01/03/22 13:04	1
Isopropylbenzene	0.0110		0.00100	0.000161	mg/L		01/03/22 13:04	1
Methylene Chloride	<0.00191	U	0.00500	0.00191	mg/L		01/03/22 13:04	1
m,p-Xylenes	0.0886		0.0100	0.000330	mg/L		01/03/22 13:04	1
MTBE	<0.000571	U	0.00500	0.000571	mg/L		01/03/22 13:04	1
Naphthalene	<0.00200	U	0.0100	0.00200	mg/L		01/03/22 13:04	1
n-Butylbenzene	0.00130		0.00100	0.000286	mg/L		01/03/22 13:04	1
N-Propylbenzene	0.00544		0.00100	0.000179	mg/L		01/03/22 13:04	1
o-Xylene	0.0143		0.00100	0.000192	mg/L		01/03/22 13:04	1
p-Cymene (p-Isopropyltoluene)	0.00128		0.00100	0.000233	mg/L		01/03/22 13:04	1
sec-Butylbenzene	0.00199		0.00100	0.000199	mg/L		01/03/22 13:04	1
Styrene	<0.000623	U	0.00100	0.000623	mg/L		01/03/22 13:04	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195	mg/L		01/03/22 13:04	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327	mg/L		01/03/22 13:04	1
1,1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284	mg/L		01/03/22 13:04	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L		01/03/22 13:04	1
Toluene	0.0474		0.00100	0.000500	mg/L		01/03/22 13:04	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256	mg/L		01/03/22 13:04	1

Eurofins Midland

Client Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9760-1

Date Collected: 12/29/21 08:40

Matrix: Water

Date Received: 12/29/21 15:36

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			01/03/22 13:04	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 13:04	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 13:04	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			01/03/22 13:04	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			01/03/22 13:04	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			01/03/22 13:04	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			01/03/22 13:04	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			01/03/22 13:04	1
1,2,4-Trimethylbenzene	0.0291		0.00100	0.000252 mg/L			01/03/22 13:04	1
1,3,5-Trimethylbenzene	0.00913		0.00100	0.000279 mg/L			01/03/22 13:04	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			01/03/22 13:04	1
Xylenes, Total	0.103		0.0100	0.000330 mg/L			01/03/22 13:04	1
Total BTEX	0.179		0.0100	0.00100 mg/L			01/03/22 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		74 - 124		01/03/22 13:04	1
Dibromofluoromethane (Surr)	97		75 - 131		01/03/22 13:04	1
1,2-Dichloroethane-d4 (Surr)	89		63 - 144		01/03/22 13:04	1
Toluene-d8 (Surr)	97		80 - 117		01/03/22 13:04	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.476	J	0.500	0.0711 mg/L			12/31/21 03:47	1
Nitrate as N	0.224		0.100	0.0391 mg/L			12/31/21 03:47	1
Chloride	225		0.500	0.200 mg/L			12/31/21 03:47	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/31/21 03:47	1
Fluoride	0.588		0.500	0.100 mg/L			12/31/21 03:47	1
Sulfate	43.8		0.500	0.109 mg/L			12/31/21 03:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	300		10.0	1.47 mg/L		01/03/22 11:30	01/03/22 23:02	50
Magnesium	57.5		0.200	0.0500 mg/L		01/03/22 11:30	01/03/22 22:22	1
Potassium	4.69		0.500	0.107 mg/L		01/03/22 11:30	01/03/22 22:22	1
Sodium	84.9		5.00	0.667 mg/L		01/03/22 11:30	01/12/22 15:51	10
SiO2	70.0		1.07	0.0781 mg/L		01/03/22 11:30	01/03/22 22:22	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	1.62			%			01/04/22 13:19	1
Alkalinity	657		4.00	4.00 mg/L			01/03/22 13:23	1
Bicarbonate Alkalinity as CaCO3	657		4.00	4.00 mg/L			01/03/22 13:23	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			01/03/22 13:23	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00 mg/L			01/03/22 13:23	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00 mg/L			01/03/22 13:23	1
Total Dissolved Solids	1220		20.0	20.0 mg/L			12/30/21 13:13	1
pH	6.6	HF		SU			01/03/22 16:36	1
Temperature	18.1	HF		Celsius			01/03/22 16:36	1

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Surrogate Summary

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

Job ID: 880-9760-1
SDG: Hobbs NM

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB	DBFM	DCA	TOL
		(74-124)	(75-131)	(63-144)	(80-117)
860-18227-A-6 MS	Matrix Spike	96	98	92	96
880-9760-1	Levey Well	94	97	89	97
LCS 860-36168/3	Lab Control Sample	96	100	94	97
LCSD 860-36168/4	Lab Control Sample Dup	95	99	94	96
MB 860-36168/9	Method Blank	98	97	94	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 Hobb NM - 03B1417001

Job ID: 880-9760-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-36168/9

Matrix: Water

Analysis Batch: 36168

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			01/03/22 11:22	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			01/03/22 11:22	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			01/03/22 11:22	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			01/03/22 11:22	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			01/03/22 11:22	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			01/03/22 11:22	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			01/03/22 11:22	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			01/03/22 11:22	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			01/03/22 11:22	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			01/03/22 11:22	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			01/03/22 11:22	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			01/03/22 11:22	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			01/03/22 11:22	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			01/03/22 11:22	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			01/03/22 11:22	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			01/03/22 11:22	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			01/03/22 11:22	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			01/03/22 11:22	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			01/03/22 11:22	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			01/03/22 11:22	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			01/03/22 11:22	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			01/03/22 11:22	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			01/03/22 11:22	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			01/03/22 11:22	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			01/03/22 11:22	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			01/03/22 11:22	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			01/03/22 11:22	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			01/03/22 11:22	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			01/03/22 11:22	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			01/03/22 11:22	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			01/03/22 11:22	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 11:22	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			01/03/22 11:22	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			01/03/22 11:22	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			01/03/22 11:22	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			01/03/22 11:22	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			01/03/22 11:22	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			01/03/22 11:22	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			01/03/22 11:22	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			01/03/22 11:22	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			01/03/22 11:22	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			01/03/22 11:22	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			01/03/22 11:22	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			01/03/22 11:22	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			01/03/22 11:22	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			01/03/22 11:22	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			01/03/22 11:22	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			01/03/22 11:22	1

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QC Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

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

Lab Sample ID: MB 860-36168/9

Matrix: Water

Analysis Batch: 36168

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	<0.000256	U	0.00100	0.000256 mg/L			01/03/22 11:22	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			01/03/22 11:22	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 11:22	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 11:22	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			01/03/22 11:22	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			01/03/22 11:22	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			01/03/22 11:22	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			01/03/22 11:22	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			01/03/22 11:22	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			01/03/22 11:22	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			01/03/22 11:22	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			01/03/22 11:22	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			01/03/22 11:22	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			01/03/22 11:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		01/03/22 11:22	1
Dibromofluoromethane (Surr)	97		75 - 131		01/03/22 11:22	1
1,2-Dichloroethane-d4 (Surr)	94		63 - 144		01/03/22 11:22	1
Toluene-d8 (Surr)	100		80 - 117		01/03/22 11:22	1

Lab Sample ID: LCS 860-36168/3

Matrix: Water

Analysis Batch: 36168

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	0.04595		mg/L		92	66 - 142
Bromobenzene	0.0500	0.04787		mg/L		96	75 - 125
Bromochloromethane	0.0500	0.04805		mg/L		96	60 - 140
Bromodichloromethane	0.0500	0.04644		mg/L		93	75 - 125
Bromoform	0.0500	0.05050		mg/L		101	75 - 125
Bromomethane	0.0500	0.03927		mg/L		79	60 - 140
2-Butanone	0.250	0.2465		mg/L		99	60 - 140
Carbon tetrachloride	0.0500	0.04566		mg/L		91	62 - 125
Chlorobenzene	0.0500	0.04673		mg/L		93	60 - 133
Chloroethane	0.0500	0.04369		mg/L		87	60 - 140
Chloroform	0.0500	0.04615		mg/L		92	70 - 130
Chloromethane	0.0500	0.04255		mg/L		85	60 - 140
2-Chlorotoluene	0.0500	0.04604		mg/L		92	73 - 125
4-Chlorotoluene	0.0500	0.04630		mg/L		93	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04624		mg/L		92	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04583		mg/L		92	74 - 125
Dibromochloromethane	0.0500	0.04880		mg/L		98	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04997		mg/L		100	59 - 125
1,2-Dibromoethane	0.0500	0.04802		mg/L		96	73 - 125
1,2-Dichlorobenzene	0.0500	0.04743		mg/L		95	75 - 125
1,3-Dichlorobenzene	0.0500	0.04727		mg/L		95	75 - 125
1,4-Dichlorobenzene	0.0500	0.04790		mg/L		96	75 - 125

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QC Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-36168/3

Matrix: Water

Analysis Batch: 36168

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.03748		mg/L		75	70 - 130
1,1-Dichloroethane	0.0500	0.04508		mg/L		90	72 - 125
1,2-Dichloroethane	0.0500	0.04409		mg/L		88	68 - 127
1,1-Dichloroethene	0.0500	0.04686		mg/L		94	59 - 172
1,2-Dichloropropane	0.0500	0.04596		mg/L		92	74 - 125
1,3-Dichloropropane	0.0500	0.04610		mg/L		92	75 - 125
2,2-Dichloropropane	0.0500	0.04700		mg/L		94	75 - 125
1,1-Dichloropropene	0.0500	0.04574		mg/L		91	75 - 125
Ethylbenzene	0.0500	0.04600		mg/L		92	75 - 125
Hexachlorobutadiene	0.0500	0.05060		mg/L		101	75 - 125
Isopropylbenzene	0.0500	0.04665		mg/L		93	75 - 125
Methylene Chloride	0.0500	0.04715		mg/L		94	75 - 125
m,p-Xylenes	0.0500	0.04653		mg/L		93	75 - 125
MTBE	0.0500	0.04789		mg/L		96	65 - 135
Naphthalene	0.0500	0.04901		mg/L		98	70 - 130
n-Butylbenzene	0.0500	0.04709		mg/L		94	75 - 125
N-Propylbenzene	0.0500	0.04633		mg/L		93	75 - 125
o-Xylene	0.0500	0.04620		mg/L		92	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.04741		mg/L		95	75 - 125
sec-Butylbenzene	0.0500	0.04716		mg/L		94	75 - 125
Styrene	0.0500	0.04583		mg/L		92	75 - 125
tert-Butylbenzene	0.0500	0.04716		mg/L		94	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04717		mg/L		94	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04944		mg/L		99	74 - 125
Tetrachloroethene	0.0500	0.04824		mg/L		96	71 - 125
Toluene	0.0500	0.04581		mg/L		92	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04617		mg/L		92	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04631		mg/L		93	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04726		mg/L		95	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05081		mg/L		102	75 - 135
1,1,1-Trichloroethane	0.0500	0.04537		mg/L		91	75 - 125
1,1,2-Trichloroethane	0.0500	0.04850		mg/L		97	75 - 127
Trichloroethene	0.0500	0.04759		mg/L		95	62 - 137
Trichlorofluoromethane	0.0500	0.04610		mg/L		92	60 - 140
1,2,3-Trichloropropane	0.0500	0.04669		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04676		mg/L		94	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04661		mg/L		93	60 - 140
Vinyl chloride	0.0500	0.04203		mg/L		84	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	94		63 - 144
Toluene-d8 (Surr)	97		80 - 117

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QC Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-36168/4

Matrix: Water

Analysis Batch: 36168

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	0.04660		mg/L		93	66 - 142	1	25
Bromobenzene	0.0500	0.04729		mg/L		95	75 - 125	1	25
Bromochloromethane	0.0500	0.04697		mg/L		94	60 - 140	2	25
Bromodichloromethane	0.0500	0.04671		mg/L		93	75 - 125	1	25
Bromoform	0.0500	0.04977		mg/L		100	75 - 125	1	25
Bromomethane	0.0500	0.03967		mg/L		79	60 - 140	1	25
2-Butanone	0.250	0.2299		mg/L		92	60 - 140	7	25
Carbon tetrachloride	0.0500	0.04523		mg/L		90	62 - 125	1	25
Chlorobenzene	0.0500	0.04691		mg/L		94	60 - 133	0	25
Chloroethane	0.0500	0.04527		mg/L		91	60 - 140	4	25
Chloroform	0.0500	0.04573		mg/L		91	70 - 130	1	25
Chloromethane	0.0500	0.04356		mg/L		87	60 - 140	2	25
2-Chlorotoluene	0.0500	0.04565		mg/L		91	73 - 125	1	25
4-Chlorotoluene	0.0500	0.04546		mg/L		91	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.04559		mg/L		91	75 - 125	1	25
cis-1,3-Dichloropropene	0.0500	0.04554		mg/L		91	74 - 125	1	25
Dibromochloromethane	0.0500	0.04855		mg/L		97	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04953		mg/L		99	59 - 125	1	25
1,2-Dibromoethane	0.0500	0.04714		mg/L		94	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.04703		mg/L		94	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.04720		mg/L		94	75 - 125	0	25
1,4-Dichlorobenzene	0.0500	0.04772		mg/L		95	75 - 125	0	25
Dichlorodifluoromethane	0.0500	0.03862		mg/L		77	70 - 130	3	25
1,1-Dichloroethane	0.0500	0.04471		mg/L		89	72 - 125	1	25
1,2-Dichloroethane	0.0500	0.04438		mg/L		89	68 - 127	1	25
1,1-Dichloroethene	0.0500	0.04667		mg/L		93	59 - 172	0	25
1,2-Dichloropropane	0.0500	0.04664		mg/L		93	74 - 125	1	25
1,3-Dichloropropane	0.0500	0.04522		mg/L		90	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.04698		mg/L		94	75 - 125	0	25
1,1-Dichloropropene	0.0500	0.04606		mg/L		92	75 - 125	1	25
Ethylbenzene	0.0500	0.04614		mg/L		92	75 - 125	0	25
Hexachlorobutadiene	0.0500	0.05214		mg/L		104	75 - 125	3	25
Isopropylbenzene	0.0500	0.04716		mg/L		94	75 - 125	1	25
Methylene Chloride	0.0500	0.04581		mg/L		92	75 - 125	3	25
m,p-Xylenes	0.0500	0.04666		mg/L		93	75 - 125	0	25
MTBE	0.0500	0.04637		mg/L		93	65 - 135	3	25
Naphthalene	0.0500	0.05460		mg/L		109	70 - 130	11	25
n-Butylbenzene	0.0500	0.04730		mg/L		95	75 - 125	0	25
N-Propylbenzene	0.0500	0.04587		mg/L		92	75 - 125	1	25
o-Xylene	0.0500	0.04690		mg/L		94	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04753		mg/L		95	75 - 125	0	25
sec-Butylbenzene	0.0500	0.04715		mg/L		94	75 - 125	0	25
Styrene	0.0500	0.04621		mg/L		92	75 - 125	1	25
tert-Butylbenzene	0.0500	0.04682		mg/L		94	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.04725		mg/L		95	72 - 125	0	25
1,1,2,2-Tetrachloroethane	0.0500	0.04783		mg/L		96	74 - 125	3	25
Tetrachloroethene	0.0500	0.04884		mg/L		98	71 - 125	1	25
Toluene	0.0500	0.04578		mg/L		92	59 - 139	0	25

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QC Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

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

Lab Sample ID: LCSD 860-36168/4

Matrix: Water

Analysis Batch: 36168

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	0.04617		mg/L		92	75 - 125	0	25
trans-1,3-Dichloropropene	0.0500	0.04539		mg/L		91	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.05288		mg/L		106	75 - 137	11	25
1,2,4-Trichlorobenzene	0.0500	0.05383		mg/L		108	75 - 135	6	25
1,1,1-Trichloroethane	0.0500	0.04572		mg/L		91	75 - 125	1	25
1,1,2-Trichloroethane	0.0500	0.04771		mg/L		95	75 - 127	2	25
Trichloroethene	0.0500	0.04842		mg/L		97	62 - 137	2	25
Trichlorofluoromethane	0.0500	0.04759		mg/L		95	60 - 140	3	25
1,2,3-Trichloropropane	0.0500	0.04639		mg/L		93	75 - 125	1	25
1,2,4-Trimethylbenzene	0.0500	0.04653		mg/L		93	75 - 125	0	25
1,3,5-Trimethylbenzene	0.0500	0.04603		mg/L		92	60 - 140	1	25
Vinyl chloride	0.0500	0.04295		mg/L		86	60 - 140	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	94		63 - 144
Toluene-d8 (Surr)	96		80 - 117

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-36084/39

Matrix: Water

Analysis Batch: 36084

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			12/30/21 19:00	1
Chloride	<0.200	U	0.500	0.200 mg/L			12/30/21 19:00	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/30/21 19:00	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/30/21 19:00	1

Lab Sample ID: LCS 860-36084/40

Matrix: Water

Analysis Batch: 36084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	10.0	10.02		mg/L		100	90 - 110
Chloride	10.0	10.36		mg/L		104	90 - 110
Fluoride	10.0	10.47		mg/L		105	90 - 110
Sulfate	10.0	10.04		mg/L		100	90 - 110

Lab Sample ID: LCSD 860-36084/41

Matrix: Water

Analysis Batch: 36084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide	10.0	10.03		mg/L		100	90 - 110	0	20
Chloride	10.0	10.30		mg/L		103	90 - 110	1	20
Fluoride	10.0	10.48		mg/L		105	90 - 110	0	20

Eurofins Midland

QC Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-36084/41

Matrix: Water

Analysis Batch: 36084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.01		mg/L		100	90 - 110	0	20

Lab Sample ID: MB 860-36085/39

Matrix: Water

Analysis Batch: 36085

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			12/30/21 19:00	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/30/21 19:00	1

Lab Sample ID: LCS 860-36085/40

Matrix: Water

Analysis Batch: 36085

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	10.04	E	mg/L		100	80 - 120	
Nitrite as N	5.00	5.220		mg/L		104	80 - 120	

Lab Sample ID: LCSD 860-36085/41

Matrix: Water

Analysis Batch: 36085

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	10.04	E	mg/L		100	80 - 120	0	20
Nitrite as N	5.00	5.234		mg/L		105	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 860-36229/1-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.0293	U	0.200	0.0293 mg/L		01/03/22 11:30	01/03/22 20:47	1
Magnesium	<0.0500	U	0.200	0.0500 mg/L		01/03/22 11:30	01/03/22 20:47	1
Potassium	<0.107	U	0.500	0.107 mg/L		01/03/22 11:30	01/03/22 20:47	1
Sodium	<0.0667	U	0.500	0.0667 mg/L		01/03/22 11:30	01/03/22 20:47	1
SiO2	<0.0781	U	1.07	0.0781 mg/L		01/03/22 11:30	01/03/22 20:47	1

Lab Sample ID: MB 860-36229/1-A

Matrix: Water

Analysis Batch: 36962

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<0.0667	U	0.500	0.0667 mg/L		01/03/22 11:30	01/09/22 22:56	1

Eurofins Midland

QC Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

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

Lab Sample ID: LCS 860-36229/2-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Calcium	25.0	25.33		mg/L		101	85 - 115	
Magnesium	25.0	24.82		mg/L		99	85 - 115	
Potassium	10.0	10.12		mg/L		101	85 - 115	
Sodium	25.0	25.10		mg/L		100	85 - 115	
SiO2	21.4	22.99		mg/L		107	85 - 115	

Lab Sample ID: LCS 860-36229/2-A

Matrix: Water

Analysis Batch: 36962

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Sodium	25.0	26.15		mg/L		105	85 - 115	

Lab Sample ID: LCSD 860-36229/3-A

Matrix: Water

Analysis Batch: 36383

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits		RPD	Limit
Calcium	25.0	25.38		mg/L		102	85 - 115		0	20
Magnesium	25.0	24.89		mg/L		100	85 - 115		0	20
Potassium	10.0	10.13		mg/L		101	85 - 115		0	20
Sodium	25.0	25.14		mg/L		101	85 - 115		0	20
SiO2	21.4	23.07		mg/L		108	85 - 115		0	20

Lab Sample ID: LCSD 860-36229/3-A

Matrix: Water

Analysis Batch: 36962

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 36229

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits		RPD	Limit
Sodium	25.0	26.11		mg/L		104	85 - 115		0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-36292/4

Matrix: Water

Analysis Batch: 36292

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			01/03/22 12:53	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			01/03/22 12:53	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			01/03/22 12:53	1
Hydroxide Alkalinity	<4.00	U	4.00	mg/L			01/03/22 12:53	1
Phenolphthalein Alkalinity	<4.00	U	4.00	mg/L			01/03/22 12:53	1

Lab Sample ID: LCS 860-36292/5

Matrix: Water

Analysis Batch: 36292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Alkalinity	250	234.6		mg/L		94	85 - 115	

Eurofins Midland

QC Sample Results

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

Job ID: 880-9760-1
SDG: Hobbs NM

Method: SM 2320B - Alkalinity

Lab Sample ID: LCSD 860-36292/6

Matrix: Water

Analysis Batch: 36292

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	236.4		mg/L		95	85 - 115	1	20

Lab Sample ID: 880-9760-1 DU

Matrix: Water

Analysis Batch: 36292

Client Sample ID: Levey Well

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	657		662.5		mg/L		0.8	20
Bicarbonate Alkalinity as CaCO3	657		662.5		mg/L		0.8	20
Carbonate Alkalinity as CaCO3	<4.00	U	<4.00	U	mg/L		NC	20
Hydroxide Alkalinity	<4.00	U	<4.00	U	mg/L		NC	20
Phenolphthalein Alkalinity	<4.00	U	<4.00	U	mg/L		NC	20

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

Lab Sample ID: MB 860-36109/1

Matrix: Water

Analysis Batch: 36109

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			12/30/21 13:13	1

Lab Sample ID: LCS 860-36109/2

Matrix: Water

Analysis Batch: 36109

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD
Total Dissolved Solids	1000	1073		mg/L		107	80 - 120	

Lab Sample ID: LCSD 860-36109/3

Matrix: Water

Analysis Batch: 36109

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	1075		mg/L		108	80 - 120	0	10

Eurofins Midland

QC Association Summary

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

Job ID: 880-9760-1
SDG: Hobbs NM

GC/MS VOA

Analysis Batch: 36168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total/NA	Water	8260C	
MB 860-36168/9	Method Blank	Total/NA	Water	8260C	
LCS 860-36168/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-36168/4	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 36084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total/NA	Water	300.0	
MB 860-36084/39	Method Blank	Total/NA	Water	300.0	
LCS 860-36084/40	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-36084/41	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 36085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total/NA	Water	300.0	
MB 860-36085/39	Method Blank	Total/NA	Water	300.0	
LCS 860-36085/40	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-36085/41	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 36229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total Recoverable	Water	200.7	
MB 860-36229/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 860-36229/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCSD 860-36229/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7	

Analysis Batch: 36383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	36229
880-9760-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	36229
MB 860-36229/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	36229
LCS 860-36229/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	36229
LCSD 860-36229/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	36229

Analysis Batch: 36962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-36229/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	36229
LCS 860-36229/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	36229
LCSD 860-36229/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.7 Rev 4.4	36229

Analysis Batch: 37314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total Recoverable	Water	200.7 Rev 4.4	36229

Eurofins Midland

QC Association Summary

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

Job ID: 880-9760-1
SDG: Hobbs NM

General Chemistry

Analysis Batch: 36109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total/NA	Water	SM 2540C	
MB 860-36109/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-36109/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-36109/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 36286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 36292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total/NA	Water	SM 2320B	
MB 860-36292/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-36292/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-36292/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
880-9760-1 DU	Levey Well	Total/NA	Water	SM 2320B	

Analysis Batch: 36411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9760-1	Levey Well	Total/NA	Water	SM 1030E	

Lab Chronicle

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

Job ID: 880-9760-1
SDG: Hobbs NM

Client Sample ID: Levey Well

Lab Sample ID: 880-9760-1

Date Collected: 12/29/21 08:40

Matrix: Water

Date Received: 12/29/21 15:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	36168	01/03/22 13:04	TTD	XEN STF
Total/NA	Analysis	300.0		1	36084	12/31/21 03:47	ANP	XEN STF
Total/NA	Analysis	300.0		1	36085	12/31/21 03:47	ANP	XEN STF
Total Recoverable	Prep	200.7			36229	01/03/22 11:30	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		1	36383	01/03/22 22:22	AV	XEN STF
Total Recoverable	Prep	200.7			36229	01/03/22 11:30	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		50	36383	01/03/22 23:02	AV	XEN STF
Total Recoverable	Prep	200.7			36229	01/03/22 11:30	MD	XEN STF
Total Recoverable	Analysis	200.7 Rev 4.4		10	37314	01/12/22 15:51	AV	XEN STF
Total/NA	Analysis	SM 1030E		1	36411	01/04/22 13:19	AA	XEN STF
Total/NA	Analysis	SM 2320B		1	36292	01/03/22 13:23	YGG	XEN STF
Total/NA	Analysis	SM 2540C		1	36109	12/30/21 13:13	ADL	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	36286	01/03/22 16:36	TL	XEN STF

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

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Accreditation/Certification Summary

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

Job ID: 880-9760-1
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	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	SiO2
8260C		Water	Total BTEX
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 Hobb NM - 03B1417001

Job ID: 880-9760-1
SDG: Hobbs NM

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

Sample Summary

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

Job ID: 880-9760-1
SDG: Hobbs NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9760-1	Levey Well	Water	12/29/21 08:40	12/29/21 15:36

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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)565-3443 Lubbock, TX (806)794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-392-1550)

Work Order No:

www.xenco.com Page 1 of 1

Project Manager:		Beaux Jennings	Bill to: (if different)	
Company Name:		Ensolum LLC	Company Name:	
Address:		705 W Wadley #210	Address:	
City, State ZIP:		Midland TX	City, State ZIP:	
Phone:		210-219-8858	Email:	bjenjings@ensolum.com

Work Order Comments	
Program: UST/PT	☐ PRP ☐ Brownfields ☒ RC ☐ Superfund ☐
State of Project:	<i>New Mexico</i>
Reporting Level II	☐ Level III ☐ PST/UST ☐ TRP ☐ Level IV ☐
Deliverables EDD	☐ ADAPT ☐ Other:

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:	Aaron Marquez		Due Date:									
SAMPLE RECEIPT				Temp Blank:	Yes	No	Wet Ice:	(Yes)	No			
Temperature (°C):	10 / 10.2		Thermometer ID	T-28								
Received Intact:	(Yes) No											
Cooler Custody Seals:	Yes No (N/A)		Correction Factor:	10								
Sample Custody Seals:	Yes No (N/A)		Total Containers:									
Number of Containers												
F, Cl, SO ₄ , B												
Ca, K, Mg, Na, Si												
ty												
TAT starts the day received by the lab, if received by 4:30pm												

[illegible]

CUSTODY SEAL



ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 12-29-21

Signature: 



880-9760 Chain of Custody

[illegible]

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		12/29/12 15:32			
3		4			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9760-1

SDG Number: Hobbs NM

Login Number: 9760

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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: 880-9760-1

SDG Number: Hobbs NM

Login Number: 9760

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Houston

List Creation: 12/30/21 04:53 PM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-8861-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

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

Authorized for release by:
12/13/2021 3:48:03 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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

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

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

Laboratory Job ID: 880-8861-1

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Definitions/Glossary

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

Qualifiers

GC/MS VOA

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

GC Semi VOA

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

HPLC/IC

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

General Chemistry

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

Glossary

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

Eurofins Xenco, Midland

Case Narrative

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

Job ID: 880-8861-1

Job ID: 880-8861-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-8861-1

Receipt

The samples were received on 12/1/2021 3:24 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 14.2°C

GC/MS VOA

Method 8260C: The matrix spike recoveries for analytical batch 860-33371 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/LCSD) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFMS: The following samples were received outside of holding time: MW-1 (880-8861-1) and MW-2 (880-8861-2).

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: 880-8861-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-8861-1

Date Collected: 12/01/21 09:55

Matrix: Water

Date Received: 12/01/21 15:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/08/21 16:02	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/08/21 16:02	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/08/21 16:02	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/08/21 16:02	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/08/21 16:02	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/08/21 16:02	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/08/21 16:02	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/08/21 16:02	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/08/21 16:02	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/08/21 16:02	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/08/21 16:02	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/08/21 16:02	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/08/21 16:02	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/08/21 16:02	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/08/21 16:02	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/08/21 16:02	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/08/21 16:02	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/08/21 16:02	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/08/21 16:02	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/08/21 16:02	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/08/21 16:02	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/08/21 16:02	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/08/21 16:02	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/08/21 16:02	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/08/21 16:02	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/08/21 16:02	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/08/21 16:02	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/08/21 16:02	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/08/21 16:02	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/08/21 16:02	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/08/21 16:02	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 16:02	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/08/21 16:02	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/08/21 16:02	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/08/21 16:02	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/08/21 16:02	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/08/21 16:02	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/08/21 16:02	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/08/21 16:02	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/08/21 16:02	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/08/21 16:02	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/08/21 16:02	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/08/21 16:02	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/08/21 16:02	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/08/21 16:02	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/08/21 16:02	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/08/21 16:02	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/08/21 16:02	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/08/21 16:02	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-8861-1

Date Collected: 12/01/21 09:55

Matrix: Water

Date Received: 12/01/21 15:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/08/21 16:02	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 16:02	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 16:02	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/08/21 16:02	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/08/21 16:02	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/08/21 16:02	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/08/21 16:02	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/08/21 16:02	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/08/21 16:02	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/08/21 16:02	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/08/21 16:02	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/08/21 16:02	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/08/21 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		12/08/21 16:02	1
Dibromofluoromethane (Surr)	96		75 - 131		12/08/21 16:02	1
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		12/08/21 16:02	1
Toluene-d8 (Surr)	102		80 - 117		12/08/21 16:02	1

Method: 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			12/03/21 15:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.935	U	4.73	0.935 mg/L		12/09/21 12:43	12/09/21 14:31	1
Diesel Range Organics (Over C10-C28)	<0.935	U	4.73	0.935 mg/L		12/09/21 12:43	12/09/21 14:31	1
Oil Range Organics (Over C28-C36)	<0.902	U	4.73	0.902 mg/L		12/09/21 12:43	12/09/21 14:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 135			12/09/21 12:43	12/09/21 14:31	1
o-Terphenyl	120		70 - 135			12/09/21 12:43	12/09/21 14:31	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	222		0.500	0.200 mg/L			12/07/21 22:09	1
Nitrate as N	0.141	H	0.100	0.0391 mg/L			12/07/21 22:09	1
Fluoride	0.596		0.500	0.100 mg/L			12/07/21 22:09	1
Nitrite as N	<0.0293	U H	0.100	0.0293 mg/L			12/07/21 22:09	1
Sulfate	61.0		0.500	0.109 mg/L			12/07/21 22:09	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	390		4.00	4.00 mg/L			12/08/21 14:35	1
Bicarbonate Alkalinity as CaCO3	390		4.00	4.00 mg/L			12/08/21 14:35	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/08/21 14:35	1
Carbon dioxide	382			mg/L			12/13/21 15:23	1
Carbon Dioxide, Free	39.0			mg/L			12/13/21 15:23	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-8861-1

Client Sample ID: MW-1

Lab Sample ID: 880-8861-1

Date Collected: 12/01/21 09:55

Matrix: Water

Date Received: 12/01/21 15:24

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3	HF		SU			12/13/21 12:26	1
Temperature	19.4	HF		Celsius			12/13/21 12:26	1
Sulfide	<0.495	U	5.00	0.495 mg/L			12/08/21 18:14	1

Client Sample ID: MW-2

Lab Sample ID: 880-8861-2

Date Collected: 12/01/21 10:55

Matrix: Water

Date Received: 12/01/21 15:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0189		0.00100	0.000214 mg/L			12/08/21 16:23	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/08/21 16:23	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/08/21 16:23	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/08/21 16:23	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/08/21 16:23	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/08/21 16:23	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/08/21 16:23	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/08/21 16:23	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/08/21 16:23	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/08/21 16:23	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/08/21 16:23	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/08/21 16:23	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/08/21 16:23	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/08/21 16:23	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/08/21 16:23	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/08/21 16:23	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/08/21 16:23	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/08/21 16:23	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/08/21 16:23	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/08/21 16:23	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/08/21 16:23	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/08/21 16:23	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/08/21 16:23	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/08/21 16:23	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/08/21 16:23	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/08/21 16:23	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/08/21 16:23	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/08/21 16:23	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/08/21 16:23	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/08/21 16:23	1
Ethylbenzene	0.0143		0.00100	0.000515 mg/L			12/08/21 16:23	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 16:23	1
Isopropylbenzene	0.00604		0.00100	0.000161 mg/L			12/08/21 16:23	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/08/21 16:23	1
m,p-Xylenes	0.0813		0.0100	0.000330 mg/L			12/08/21 16:23	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/08/21 16:23	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/08/21 16:23	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/08/21 16:23	1
N-Propylbenzene	0.00163		0.00100	0.000179 mg/L			12/08/21 16:23	1
o-Xylene	0.00529		0.00100	0.000192 mg/L			12/08/21 16:23	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-8861-2

Date Collected: 12/01/21 10:55

Matrix: Water

Date Received: 12/01/21 15:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
p-Cymene (p-Isopropyltoluene)	0.000506	J	0.00100	0.000233	mg/L		12/08/21 16:23	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199	mg/L		12/08/21 16:23	1
Styrene	<0.000623	U	0.00100	0.000623	mg/L		12/08/21 16:23	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195	mg/L		12/08/21 16:23	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327	mg/L		12/08/21 16:23	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284	mg/L		12/08/21 16:23	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L		12/08/21 16:23	1
Toluene	0.00198		0.00100	0.000500	mg/L		12/08/21 16:23	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256	mg/L		12/08/21 16:23	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752	mg/L		12/08/21 16:23	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200	mg/L		12/08/21 16:23	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200	mg/L		12/08/21 16:23	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504	mg/L		12/08/21 16:23	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228	mg/L		12/08/21 16:23	1
Trichloroethene	<0.000424	U	0.00500	0.000424	mg/L		12/08/21 16:23	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245	mg/L		12/08/21 16:23	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283	mg/L		12/08/21 16:23	1
1,2,4-Trimethylbenzene	0.0194		0.00100	0.000252	mg/L		12/08/21 16:23	1
1,3,5-Trimethylbenzene	0.00496		0.00100	0.000279	mg/L		12/08/21 16:23	1
Vinyl chloride	<0.000234	U	0.00200	0.000234	mg/L		12/08/21 16:23	1
Xylenes, Total	0.0866		0.0100	0.000330	mg/L		12/08/21 16:23	1
Total BTEX	0.122		0.0100	0.00100	mg/L		12/08/21 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		12/08/21 16:23	1
Dibromofluoromethane (Surr)	93		75 - 131		12/08/21 16:23	1
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		12/08/21 16:23	1
Toluene-d8 (Surr)	104		80 - 117		12/08/21 16:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.69	J	4.62	0.912	mg/L		12/03/21 15:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.69	J	4.62	0.912	mg/L		12/09/21 12:43	12/09/21 14:49	1
Diesel Range Organics (Over C10-C28)	<0.912	U	4.62	0.912	mg/L		12/09/21 12:43	12/09/21 14:49	1
Oil Range Organics (Over C28-C36)	<0.880	U	4.62	0.880	mg/L		12/09/21 12:43	12/09/21 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 135				12/09/21 12:43	12/09/21 14:49	1
o-Terphenyl	92		70 - 135				12/09/21 12:43	12/09/21 14:49	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		0.500	0.200	mg/L		12/07/21 22:29	1
Nitrate as N	0.604	H	0.100	0.0391	mg/L		12/07/21 22:29	1
Fluoride	0.148	J	0.500	0.100	mg/L		12/07/21 22:29	1
Nitrite as N	0.511	H	0.100	0.0293	mg/L		12/07/21 22:29	1

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Client Sample Results

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

Job ID: 880-8861-1

Client Sample ID: MW-2
Date Collected: 12/01/21 10:55
Date Received: 12/01/21 15:24

Lab Sample ID: 880-8861-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography (Continued)									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	103		0.500	0.109	mg/L			12/07/21 22:29	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1240		4.00	4.00	mg/L			12/08/21 14:25	1
Bicarbonate Alkalinity as CaCO3	1240		4.00	4.00	mg/L			12/08/21 14:25	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			12/08/21 14:25	1
Carbon dioxide	1410				mg/L			12/13/21 15:23	1
Carbon Dioxide, Free	313				mg/L			12/13/21 15:23	1
pH	6.9	HF			SU			12/13/21 12:26	1
Temperature	19.2	HF			Celsius			12/13/21 12:26	1
Sulfide	<0.495	U	5.00	0.495	mg/L			12/08/21 18:14	1

Surrogate Summary

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

Job ID: 880-8861-1

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)	(80-117)
860-16643-E-6 MS	Matrix Spike	99	95	99	97
880-8861-1	MW-1	98	96	106	102
880-8861-2	MW-2	98	93	105	104
LCS 860-33371/3	Lab Control Sample	98	95	99	97
LCSD 860-33371/4	Lab Control Sample Dup	98	95	99	97
MB 860-33371/9	Method Blank	97	95	103	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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-135)	(70-135)
880-8861-1	MW-1	112	120
880-8861-2	MW-2	86	92
880-8861-2 MS	MW-2	113	88
LCS 860-33611/2-A	Lab Control Sample	128	103
LCSD 860-33611/3-A	Lab Control Sample Dup	128	101
MB 860-33611/1-A	Method Blank	110	119
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-33371/9

Matrix: Water

Analysis Batch: 33371

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/08/21 13:59	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/08/21 13:59	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/08/21 13:59	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/08/21 13:59	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/08/21 13:59	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/08/21 13:59	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/08/21 13:59	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/08/21 13:59	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/08/21 13:59	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/08/21 13:59	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/08/21 13:59	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/08/21 13:59	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/08/21 13:59	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/08/21 13:59	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/08/21 13:59	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/08/21 13:59	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/08/21 13:59	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/08/21 13:59	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/08/21 13:59	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/08/21 13:59	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/08/21 13:59	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/08/21 13:59	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/08/21 13:59	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/08/21 13:59	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/08/21 13:59	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/08/21 13:59	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/08/21 13:59	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/08/21 13:59	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/08/21 13:59	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/08/21 13:59	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/08/21 13:59	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 13:59	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/08/21 13:59	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/08/21 13:59	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/08/21 13:59	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/08/21 13:59	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/08/21 13:59	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/08/21 13:59	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/08/21 13:59	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/08/21 13:59	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/08/21 13:59	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/08/21 13:59	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/08/21 13:59	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/08/21 13:59	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/08/21 13:59	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/08/21 13:59	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/08/21 13:59	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/08/21 13:59	1

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QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-33371/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33371

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/08/21 13:59	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/08/21 13:59	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 13:59	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/08/21 13:59	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/08/21 13:59	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/08/21 13:59	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/08/21 13:59	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/08/21 13:59	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/08/21 13:59	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/08/21 13:59	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/08/21 13:59	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/08/21 13:59	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/08/21 13:59	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/08/21 13:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		74 - 124		12/08/21 13:59	1
Dibromofluoromethane (Surr)	95		75 - 131		12/08/21 13:59	1
1,2-Dichloroethane-d4 (Surr)	103		63 - 144		12/08/21 13:59	1
Toluene-d8 (Surr)	100		80 - 117		12/08/21 13:59	1

Lab Sample ID: LCS 860-33371/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 33371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04682		mg/L		94	66 - 142
Bromobenzene	0.0500	0.04873		mg/L		97	75 - 125
Bromochloromethane	0.0500	0.04639		mg/L		93	60 - 140
Bromodichloromethane	0.0500	0.04876		mg/L		98	75 - 125
Bromoform	0.0500	0.04854		mg/L		97	75 - 125
Bromomethane	0.0500	0.04266		mg/L		85	60 - 140
2-Butanone	0.250	0.1904		mg/L		76	60 - 140
Carbon tetrachloride	0.0500	0.05152		mg/L		103	62 - 125
Chlorobenzene	0.0500	0.04753		mg/L		95	60 - 133
Chloroethane	0.0500	0.04054		mg/L		81	60 - 140
Chloroform	0.0500	0.04756		mg/L		95	70 - 130
Chloromethane	0.0500	0.04135		mg/L		83	60 - 140
2-Chlorotoluene	0.0500	0.05028		mg/L		101	73 - 125
4-Chlorotoluene	0.0500	0.05101		mg/L		102	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04810		mg/L		96	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04776		mg/L		96	74 - 125
Dibromochloromethane	0.0500	0.04970		mg/L		99	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04973		mg/L		99	59 - 125
1,2-Dibromoethane	0.0500	0.04704		mg/L		94	73 - 125
1,2-Dichlorobenzene	0.0500	0.05008		mg/L		100	75 - 125
1,3-Dichlorobenzene	0.0500	0.05003		mg/L		100	75 - 125
1,4-Dichlorobenzene	0.0500	0.04980		mg/L		100	75 - 125

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QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-33371/3

Matrix: Water

Analysis Batch: 33371

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.04175		mg/L		83	70 - 130
1,1-Dichloroethane	0.0500	0.04515		mg/L		90	72 - 125
1,2-Dichloroethane	0.0500	0.04882		mg/L		98	68 - 127
1,1-Dichloroethene	0.0500	0.04886		mg/L		98	59 - 172
1,2-Dichloropropane	0.0500	0.04586		mg/L		92	74 - 125
1,3-Dichloropropane	0.0500	0.04715		mg/L		94	75 - 125
2,2-Dichloropropane	0.0500	0.05583		mg/L		112	75 - 125
1,1-Dichloropropene	0.0500	0.04931		mg/L		99	75 - 125
Ethylbenzene	0.0500	0.04943		mg/L		99	75 - 125
Hexachlorobutadiene	0.0500	0.06058		mg/L		121	75 - 125
Isopropylbenzene	0.0500	0.05176		mg/L		104	75 - 125
Methylene Chloride	0.0500	0.04266		mg/L		85	75 - 125
m,p-Xylenes	0.0500	0.05046		mg/L		101	75 - 125
MTBE	0.0500	0.04675		mg/L		93	65 - 135
Naphthalene	0.0500	0.06026		mg/L		121	70 - 130
n-Butylbenzene	0.0500	0.05495		mg/L		110	75 - 125
N-Propylbenzene	0.0500	0.05246		mg/L		105	75 - 125
o-Xylene	0.0500	0.05061		mg/L		101	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05503		mg/L		110	75 - 125
sec-Butylbenzene	0.0500	0.05483		mg/L		110	75 - 125
Styrene	0.0500	0.04795		mg/L		96	75 - 125
tert-Butylbenzene	0.0500	0.05292		mg/L		106	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04849		mg/L		97	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04639		mg/L		93	74 - 125
Tetrachloroethene	0.0500	0.05294		mg/L		106	71 - 125
Toluene	0.0500	0.04718		mg/L		94	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04711		mg/L		94	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04995		mg/L		100	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.06259		mg/L		125	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05923		mg/L		118	75 - 135
1,1,1-Trichloroethane	0.0500	0.04899		mg/L		98	75 - 125
1,1,2-Trichloroethane	0.0500	0.04756		mg/L		95	75 - 127
Trichloroethene	0.0500	0.04993		mg/L		100	62 - 137
Trichlorofluoromethane	0.0500	0.04901		mg/L		98	60 - 140
1,2,3-Trichloropropane	0.0500	0.04664		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05271		mg/L		105	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05233		mg/L		105	60 - 140
Vinyl chloride	0.0500	0.03923		mg/L		78	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	95		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-33371/4

Matrix: Water

Analysis Batch: 33371

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	0.04765		mg/L		95	66 - 142	2	25
Bromobenzene	0.0500	0.05039		mg/L		101	75 - 125	3	25
Bromochloromethane	0.0500	0.04739		mg/L		95	60 - 140	2	25
Bromodichloromethane	0.0500	0.04950		mg/L		99	75 - 125	2	25
Bromoform	0.0500	0.04904		mg/L		98	75 - 125	1	25
Bromomethane	0.0500	0.04306		mg/L		86	60 - 140	1	25
2-Butanone	0.250	0.1888		mg/L		76	60 - 140	1	25
Carbon tetrachloride	0.0500	0.05044		mg/L		101	62 - 125	2	25
Chlorobenzene	0.0500	0.04884		mg/L		98	60 - 133	3	25
Chloroethane	0.0500	0.04089		mg/L		82	60 - 140	1	25
Chloroform	0.0500	0.04844		mg/L		97	70 - 130	2	25
Chloromethane	0.0500	0.03988		mg/L		80	60 - 140	4	25
2-Chlorotoluene	0.0500	0.05179		mg/L		104	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05202		mg/L		104	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.04848		mg/L		97	75 - 125	1	25
cis-1,3-Dichloropropene	0.0500	0.04957		mg/L		99	74 - 125	4	25
Dibromochloromethane	0.0500	0.05045		mg/L		101	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04979		mg/L		100	59 - 125	0	25
1,2-Dibromoethane	0.0500	0.04801		mg/L		96	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05090		mg/L		102	75 - 125	2	25
1,3-Dichlorobenzene	0.0500	0.05165		mg/L		103	75 - 125	3	25
1,4-Dichlorobenzene	0.0500	0.05093		mg/L		102	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.03615		mg/L		72	70 - 130	14	25
1,1-Dichloroethane	0.0500	0.04528		mg/L		91	72 - 125	0	25
1,2-Dichloroethane	0.0500	0.04944		mg/L		99	68 - 127	1	25
1,1-Dichloroethene	0.0500	0.04775		mg/L		96	59 - 172	2	25
1,2-Dichloropropane	0.0500	0.04718		mg/L		94	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.04831		mg/L		97	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.05567		mg/L		111	75 - 125	0	25
1,1-Dichloropropene	0.0500	0.04896		mg/L		98	75 - 125	1	25
Ethylbenzene	0.0500	0.05033		mg/L		101	75 - 125	2	25
Hexachlorobutadiene	0.0500	0.05962		mg/L		119	75 - 125	2	25
Isopropylbenzene	0.0500	0.05241		mg/L		105	75 - 125	1	25
Methylene Chloride	0.0500	0.04275		mg/L		86	75 - 125	0	25
m,p-Xylenes	0.0500	0.05155		mg/L		103	75 - 125	2	25
MTBE	0.0500	0.04762		mg/L		95	65 - 135	2	25
Naphthalene	0.0500	0.06222		mg/L		124	70 - 130	3	25
n-Butylbenzene	0.0500	0.05443		mg/L		109	75 - 125	1	25
N-Propylbenzene	0.0500	0.05286		mg/L		106	75 - 125	1	25
o-Xylene	0.0500	0.05144		mg/L		103	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05533		mg/L		111	75 - 125	1	25
sec-Butylbenzene	0.0500	0.05419		mg/L		108	75 - 125	1	25
Styrene	0.0500	0.04954		mg/L		99	75 - 125	3	25
tert-Butylbenzene	0.0500	0.05350		mg/L		107	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.05003		mg/L		100	72 - 125	3	25
1,1,1,2,2-Tetrachloroethane	0.0500	0.04853		mg/L		97	74 - 125	5	25
Tetrachloroethene	0.0500	0.05238		mg/L		105	71 - 125	1	25
Toluene	0.0500	0.04790		mg/L		96	59 - 139	2	25

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QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-33371/4

Matrix: Water

Analysis Batch: 33371

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	0.04690		mg/L		94	75 - 125	0	25
trans-1,3-Dichloropropene	0.0500	0.05118		mg/L		102	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.06369		mg/L		127	75 - 137	2	25
1,2,4-Trichlorobenzene	0.0500	0.05962		mg/L		119	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.04897		mg/L		98	75 - 125	0	25
1,1,2-Trichloroethane	0.0500	0.04895		mg/L		98	75 - 127	3	25
Trichloroethene	0.0500	0.05002		mg/L		100	62 - 137	0	25
Trichlorofluoromethane	0.0500	0.04955		mg/L		99	60 - 140	1	25
1,2,3-Trichloropropane	0.0500	0.04784		mg/L		96	75 - 125	3	25
1,2,4-Trimethylbenzene	0.0500	0.05391		mg/L		108	75 - 125	2	25
1,3,5-Trimethylbenzene	0.0500	0.05280		mg/L		106	60 - 140	1	25
Vinyl chloride	0.0500	0.03881		mg/L		78	60 - 140	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		74 - 124
Dibromofluoromethane (Surr)	95		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 117

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

Lab Sample ID: MB 860-33611/1-A

Matrix: Water

Analysis Batch: 33603

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33611

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		12/09/21 12:43	12/09/21 14:13	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		12/09/21 12:43	12/09/21 14:13	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		12/09/21 12:43	12/09/21 14:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 135	12/09/21 12:43	12/09/21 14:13	1
o-Terphenyl	119		70 - 135	12/09/21 12:43	12/09/21 14:13	1

Lab Sample ID: LCS 860-33611/2-A

Matrix: Water

Analysis Batch: 33603

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	99.5	102.2		mg/L		103	70 - 135
Diesel Range Organics (Over C10-C28)	100	112.7		mg/L		112	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	128		70 - 135
o-Terphenyl	103		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-33611/3-A

Matrix: Water

Analysis Batch: 33603

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33611

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.5	113.0		mg/L		114	70 - 135	10	35
Diesel Range Organics (Over C10-C28)	100	113.4		mg/L		113	70 - 135	1	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	128		70 - 135						
o-Terphenyl	101		70 - 135						

Lab Sample ID: 880-8861-2 MS

Matrix: Water

Analysis Batch: 33603

Client Sample ID: MW-2

Prep Type: Total/NA

Prep Batch: 33611

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1.69	J	103	119.9		mg/L		115	70 - 135		
Diesel Range Organics (Over C10-C28)	<0.912	U	104	106.0		mg/L		102	70 - 135		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	113		70 - 135								
o-Terphenyl	88		70 - 135								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-33124/59

Matrix: Water

Analysis Batch: 33124

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			12/07/21 19:29	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/07/21 19:29	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/07/21 19:29	1

Lab Sample ID: LCS 860-33124/60

Matrix: Water

Analysis Batch: 33124

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.37		mg/L		104	90 - 110		
Fluoride	10.0	10.28		mg/L		103	90 - 110		
Sulfate	10.0	9.717		mg/L		97	90 - 110		

Lab Sample ID: LCSD 860-33124/61

Matrix: Water

Analysis Batch: 33124

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.62		mg/L		106	90 - 110	2	20
Fluoride	10.0	10.17		mg/L		102	90 - 110	1	20

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QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-33124/61

Matrix: Water

Analysis Batch: 33124

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	9.578		mg/L		96	90 - 110	1	20

Lab Sample ID: MB 860-33125/59

Matrix: Water

Analysis Batch: 33125

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			12/07/21 19:29	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/07/21 19:29	1

Lab Sample ID: LCS 860-33125/60

Matrix: Water

Analysis Batch: 33125

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	9.958		mg/L		100	80 - 120
Nitrite as N	5.00	5.092		mg/L		102	80 - 120

Lab Sample ID: LCSD 860-33125/61

Matrix: Water

Analysis Batch: 33125

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	9.781		mg/L		98	80 - 120	2	20
Nitrite as N	5.00	5.001		mg/L		100	80 - 120	2	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-33477/4

Matrix: Water

Analysis Batch: 33477

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			12/08/21 12:30	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/08/21 12:30	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/08/21 12:30	1

Lab Sample ID: LCS 860-33477/5

Matrix: Water

Analysis Batch: 33477

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	250	233.4		mg/L		93	85 - 115

Lab Sample ID: LCSD 860-33477/6

Matrix: Water

Analysis Batch: 33477

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	233.8		mg/L		94	85 - 115	0	20

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QC Sample Results

Client: Ensolum

Job ID: 880-8861-1

Project/Site: South Hobbs - 03B1417002

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-8861-1 DU

Matrix: Water

Analysis Batch: 34003

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	7.3	HF	7.4		SU		0.5	20
Temperature	19.4	HF	19.3		Celsius		0.5	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-33506/1

Matrix: Water

Analysis Batch: 33506

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			12/08/21 18:14	1

Lab Sample ID: LCS 860-33506/2

Matrix: Water

Analysis Batch: 33506

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	51.4	46.60		mg/L		91	80 - 120

Lab Sample ID: LCSD 860-33506/3

Matrix: Water

Analysis Batch: 33506

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfide	51.4	46.20		mg/L		90	80 - 120	1	20

Lab Sample ID: 880-8861-1 MS

Matrix: Water

Analysis Batch: 33506

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	51.4	47.80		mg/L		93	80 - 120

Lab Sample ID: 880-8861-1 MSD

Matrix: Water

Analysis Batch: 33506

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfide	<0.495	U	51.4	48.00		mg/L		93	80 - 120	0	20

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QC Association Summary

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

Job ID: 880-8861-1

GC/MS VOA

Analysis Batch: 33371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	8260C	
880-8861-2	MW-2	Total/NA	Water	8260C	
MB 860-33371/9	Method Blank	Total/NA	Water	8260C	
LCS 860-33371/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-33371/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 32219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	8015 NM	
880-8861-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 33603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	8015B NM	33611
880-8861-2	MW-2	Total/NA	Water	8015B NM	33611
MB 860-33611/1-A	Method Blank	Total/NA	Water	8015B NM	33611
LCS 860-33611/2-A	Lab Control Sample	Total/NA	Water	8015B NM	33611
LCSD 860-33611/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	33611
880-8861-2 MS	MW-2	Total/NA	Water	8015B NM	33611

Prep Batch: 33611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-8861-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-33611/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-33611/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-33611/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	
880-8861-2 MS	MW-2	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 33124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	300.0	
880-8861-2	MW-2	Total/NA	Water	300.0	
MB 860-33124/59	Method Blank	Total/NA	Water	300.0	
LCS 860-33124/60	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33124/61	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 33125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	300.0	
880-8861-2	MW-2	Total/NA	Water	300.0	
MB 860-33125/59	Method Blank	Total/NA	Water	300.0	
LCS 860-33125/60	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33125/61	Lab Control Sample Dup	Total/NA	Water	300.0	

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QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-8861-1

General Chemistry

Analysis Batch: 33477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	SM 2320B	
880-8861-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-33477/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-33477/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-33477/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 33506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-8861-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-33506/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-33506/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-33506/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-8861-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-8861-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 34003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-8861-2	MW-2	Total/NA	Water	SM 4500 H+ B	
880-8861-1 DU	MW-1	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 34027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8861-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-8861-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Lab Chronicle

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

Job ID: 880-8861-1

Client Sample ID: MW-1
Date Collected: 12/01/21 09:55
Date Received: 12/01/21 15:24

Lab Sample ID: 880-8861-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	33371	12/08/21 16:02	TTD	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/03/21 15:18	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep			33611	12/09/21 12:43	SAR	XEN STF
Total/NA	Analysis	8015B NM		1	33603	12/09/21 14:31	DD	XEN STF
Total/NA	Analysis	300.0		1	33124	12/07/21 22:09	ANP	XEN STF
Total/NA	Analysis	300.0		1	33125	12/07/21 22:09	ANP	XEN STF
Total/NA	Analysis	SM 2320B		1	33477	12/08/21 14:35	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	34027	12/13/21 15:23	AA	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	34003	12/13/21 12:26	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	33506	12/08/21 18:14	YVD	XEN STF

Client Sample ID: MW-2
Date Collected: 12/01/21 10:55
Date Received: 12/01/21 15:24

Lab Sample ID: 880-8861-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	33371	12/08/21 16:23	TTD	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/03/21 15:26	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep			33611	12/09/21 12:43	SAR	XEN STF
Total/NA	Analysis	8015B NM		1	33603	12/09/21 14:49	DD	XEN STF
Total/NA	Analysis	300.0		1	33124	12/07/21 22:29	ANP	XEN STF
Total/NA	Analysis	300.0		1	33125	12/07/21 22:29	ANP	XEN STF
Total/NA	Analysis	SM 2320B		1	33477	12/08/21 14:25	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	34027	12/13/21 15:23	AA	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	34003	12/13/21 12:26	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	33506	12/08/21 18:14	YVD	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 880-8861-1

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

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)
8260C		Water	Total BTEX
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: 880-8861-1

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

Protocol References:

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

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

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-8861-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-8861-1	MW-1	Water	12/01/21 09:55	12/01/21 15:24
880-8861-2	MW-2	Water	12/01/21 10:55	12/01/21 15:24

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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



880-8861 Chain of Custody

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

Work Order Comments	
Program: UST/PST	☐ PRP ☐ Brownfields ☐ RCRC ☐ 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:	Aaron Marquez	Due Date			
SAMPLE RECEIPT					
Temperature (°C):	14.1/14.2	Temp Blank: ☒ Yes ☒ No	Wet Ice: ☒ Yes ☒ No		
Received Intact:	Yes ☒ No ☐	Thermometer ID	TRP		
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor:	.10		
Sample Custody Seals:	Yes ☐ No ☒	Total Containers:			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	
MMW-1	GW	12-1-21	0955	75'	
MMW-2	GW	12-1-21	1055	85'	
Number of Containers					
Dissolved Carbon Dioxide 4500 CO2 c					
Dissovled 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		12/1/21 15:21	2		
3			4		
5			6		

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CUSTODY SEAL



ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 12-1-21

Signature: [Handwritten Signature]

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-8861-1

Login Number: 8861

List Source: Eurofins Xenco, Midland

List Number: 1

Creator: Teel, Brianna

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-8861-1

Login Number: 8861

List Source: Eurofins Xenco, Stafford

List Number: 2

List Creation: 12/07/21 11:20 AM

Creator: Palmar, Pedro

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.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9161-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

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

Authorized for release by:
12/16/2021 9:44:40 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through
TotalAccess

Have a Question?



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www.eurofinsus.com/Env

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

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

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

Laboratory Job ID: 880-9161-1

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Definitions/Glossary

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

General Chemistry

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

Glossary

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

Eurofins Xenco, Midland

Definitions/Glossary

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

Job ID: 880-9161-1

Glossary (Continued)

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

- 1
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Case Narrative

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

Job ID: 880-9161-1

Job ID: 880-9161-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-9161-1****Receipt**

The samples were received on 12/8/2021 4:46 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 4.7°C

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) for analytical batch 860-34007 recovered outside control limits for the following analytes: 1,2-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The matrix spike (MS) and/or matrix spike duplicate (MSD) recovery for analytical batch 860-34007 was outside control limits for the following analyte: Vinyl chloride. Results may be biased high because this analyte is a common laboratory solvent and contaminant.

Method 8260C: The matrix spike (MS) recoveries for the following sample associated with analytical batch 860-34007 were outside control limits: (880-9163-B-5 MS). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (880-9161-2). Elevated reporting limits (RLs) are provided.

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 860-34093 recovered outside control limits for the following analytes: MTBE and trans-1,2-Dichloroethene.

Method 8260C: The matrix spike (MS) recoveries for analytical batch 860-34093 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/LCSD) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 860-34382.

Method 8015MOD_NM: The surrogate recovery for Laboratory Control Spiked sample (LCS) associated with preparation batch 860-34382 and analytical batch 860-34460 was outside the upper control limits. Spiked analytes were recovered within limits, therefore data was accepted.

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

HPLC/IC

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

General Chemistry

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

Client Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9161-1

Date Collected: 12/08/21 09:40

Matrix: Water

Date Received: 12/08/21 16:46

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/13/21 19:03	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/13/21 19:03	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/13/21 19:03	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/13/21 19:03	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/13/21 19:03	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/13/21 19:03	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/13/21 19:03	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/13/21 19:03	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/13/21 19:03	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/13/21 19:03	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/13/21 19:03	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/13/21 19:03	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/13/21 19:03	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/13/21 19:03	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/13/21 19:03	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/13/21 19:03	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/13/21 19:03	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/13/21 19:03	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/13/21 19:03	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/13/21 19:03	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/13/21 19:03	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/13/21 19:03	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/13/21 19:03	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/13/21 19:03	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/13/21 19:03	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/13/21 19:03	1
1,2-Dichloropropane	<0.000396	U **	0.00500	0.000396 mg/L			12/13/21 19:03	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/13/21 19:03	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/13/21 19:03	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/13/21 19:03	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/13/21 19:03	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/13/21 19:03	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/13/21 19:03	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/13/21 19:03	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/13/21 19:03	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/13/21 19:03	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/13/21 19:03	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/13/21 19:03	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/13/21 19:03	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/13/21 19:03	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/13/21 19:03	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/13/21 19:03	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/13/21 19:03	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/13/21 19:03	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/13/21 19:03	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/13/21 19:03	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/13/21 19:03	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/13/21 19:03	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/13/21 19:03	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9161-1

Date Collected: 12/08/21 09:40

Matrix: Water

Date Received: 12/08/21 16:46

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/13/21 19:03	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/13/21 19:03	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/13/21 19:03	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/13/21 19:03	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/13/21 19:03	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/13/21 19:03	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/13/21 19:03	1
1,2,3-Trichloropropane	<0.000283	U *	0.00100	0.000283 mg/L			12/13/21 19:03	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/13/21 19:03	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/13/21 19:03	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/13/21 19:03	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/13/21 19:03	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/13/21 19:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		74 - 124		12/13/21 19:03	1
Dibromofluoromethane (Surr)	100		75 - 131		12/13/21 19:03	1
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		12/13/21 19:03	1
Toluene-d8 (Surr)	107		80 - 117		12/13/21 19:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.929	U	4.70	0.929 mg/L			12/16/21 09:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.929	U	4.70	0.929 mg/L		12/15/21 11:00	12/15/21 19:13	1
Diesel Range Organics (Over C10-C28)	<0.929	U	4.70	0.929 mg/L		12/15/21 11:00	12/15/21 19:13	1
Oil Range Organics (Over C28-C36)	<0.897	U	4.70	0.897 mg/L		12/15/21 11:00	12/15/21 19:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 135			12/15/21 11:00	12/15/21 19:13	1
o-Terphenyl	128		70 - 135			12/15/21 11:00	12/15/21 19:13	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	226		0.500	0.200 mg/L			12/09/21 13:46	1
Nitrate as N	0.162		0.100	0.0391 mg/L			12/09/21 13:46	1
Fluoride	0.358	J	0.500	0.100 mg/L			12/09/21 13:46	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/09/21 13:46	1
Sulfate	66.0		0.500	0.109 mg/L			12/09/21 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	484		4.00	4.00 mg/L			12/13/21 18:59	1
Bicarbonate Alkalinity as CaCO3	484		4.00	4.00 mg/L			12/13/21 18:59	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/13/21 18:59	1
Carbon dioxide	547			mg/L			12/13/21 15:23	1
Carbon Dioxide, Free	122			mg/L			12/13/21 15:23	1

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Client Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9161-1

Date Collected: 12/08/21 09:40

Matrix: Water

Date Received: 12/08/21 16:46

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.9	HF		SU			12/14/21 16:17	1
Temperature	18.1	HF		Celsius			12/14/21 16:17	1
Sulfide	<0.495	U	5.00	0.495 mg/L			12/10/21 17:41	1

Client Sample ID: MW-2

Lab Sample ID: 880-9161-2

Date Collected: 12/08/21 12:30

Matrix: Water

Date Received: 12/08/21 16:46

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0377		0.00100	0.000214 mg/L			12/14/21 15:19	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/14/21 15:19	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/14/21 15:19	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/14/21 15:19	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/14/21 15:19	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/14/21 15:19	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/14/21 15:19	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/14/21 15:19	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/14/21 15:19	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/14/21 15:19	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/14/21 15:19	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/14/21 15:19	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/14/21 15:19	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/14/21 15:19	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/14/21 15:19	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/14/21 15:19	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/14/21 15:19	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/14/21 15:19	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/14/21 15:19	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/14/21 15:19	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/14/21 15:19	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/14/21 15:19	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/14/21 15:19	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/14/21 15:19	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/14/21 15:19	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/14/21 15:19	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/14/21 15:19	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/14/21 15:19	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/14/21 15:19	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/14/21 15:19	1
Ethylbenzene	0.0448		0.00100	0.000515 mg/L			12/14/21 15:19	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 15:19	1
Isopropylbenzene	0.0166		0.00100	0.000161 mg/L			12/14/21 15:19	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/14/21 15:19	1
MTBE	<0.000571	U *1	0.00500	0.000571 mg/L			12/14/21 15:19	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/14/21 15:19	1
n-Butylbenzene	0.00130		0.00100	0.000286 mg/L			12/14/21 15:19	1
N-Propylbenzene	0.00500		0.00100	0.000179 mg/L			12/14/21 15:19	1
o-Xylene	0.0298		0.00100	0.000192 mg/L			12/14/21 15:19	1
p-Cymene (p-Isopropyltoluene)	0.00128		0.00100	0.000233 mg/L			12/14/21 15:19	1

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Client Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-9161-2

Date Collected: 12/08/21 12:30

Matrix: Water

Date Received: 12/08/21 16:46

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.00175		0.00100	0.000199 mg/L			12/14/21 15:19	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/14/21 15:19	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/14/21 15:19	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/14/21 15:19	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/14/21 15:19	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/14/21 15:19	1
Toluene	0.0208		0.00100	0.000500 mg/L			12/14/21 15:19	1
trans-1,2-Dichloroethene	<0.000256	U *1	0.00100	0.000256 mg/L			12/14/21 15:19	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/14/21 15:19	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 15:19	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 15:19	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/14/21 15:19	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/14/21 15:19	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/14/21 15:19	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/14/21 15:19	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/14/21 15:19	1
1,2,4-Trimethylbenzene	0.0542		0.00100	0.000252 mg/L			12/14/21 15:19	1
1,3,5-Trimethylbenzene	0.0143		0.00100	0.000279 mg/L			12/14/21 15:19	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/14/21 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		74 - 124		12/14/21 15:19	1
Dibromofluoromethane (Surr)	102		75 - 131		12/14/21 15:19	1
1,2-Dichloroethane-d4 (Surr)	106		63 - 144		12/14/21 15:19	1
Toluene-d8 (Surr)	100		80 - 117		12/14/21 15:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylenes	0.271		0.0500	0.00165 mg/L			12/14/21 16:00	5
Xylenes, Total	0.309		0.0500	0.00165 mg/L			12/14/21 16:00	5
Total BTEX	0.440		0.0500	0.00500 mg/L			12/14/21 16:00	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		74 - 124		12/14/21 16:00	5
Dibromofluoromethane (Surr)	102		75 - 131		12/14/21 16:00	5
1,2-Dichloroethane-d4 (Surr)	102		63 - 144		12/14/21 16:00	5
Toluene-d8 (Surr)	103		80 - 117		12/14/21 16:00	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.86	J	4.72	0.932 mg/L			12/16/21 09:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.86	J	4.72	0.932 mg/L		12/15/21 11:00	12/15/21 19:31	1
Diesel Range Organics (Over C10-C28)	<0.932	U	4.72	0.932 mg/L		12/15/21 11:00	12/15/21 19:31	1
Oil Range Organics (Over C28-C36)	<0.900	U	4.72	0.900 mg/L		12/15/21 11:00	12/15/21 19:31	1

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Client Sample Results

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

Job ID: 880-9161-1

Client Sample ID: MW-2
Date Collected: 12/08/21 12:30
Date Received: 12/08/21 16:46

Lab Sample ID: 880-9161-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 135	12/15/21 11:00	12/15/21 19:31	1
o-Terphenyl	120		70 - 135	12/15/21 11:00	12/15/21 19:31	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	188		0.500	0.200 mg/L			12/09/21 14:13	1
Nitrate as N	0.759		0.100	0.0391 mg/L			12/09/21 14:13	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/09/21 14:13	1
Nitrite as N	0.684		0.100	0.0293 mg/L			12/09/21 14:13	1
Sulfate	123		0.500	0.109 mg/L			12/09/21 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1250		4.00	4.00 mg/L			12/13/21 19:26	1
Bicarbonate Alkalinity as CaCO3	1250		4.00	4.00 mg/L			12/13/21 19:26	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/13/21 19:26	1
Carbon dioxide	2360			mg/L			12/13/21 15:23	1
Carbon Dioxide, Free	1260			mg/L			12/13/21 15:23	1
pH	6.3	HF		SU			12/14/21 15:35	1
Temperature	18.9	HF		Celsius			12/14/21 15:35	1
Sulfide	<0.495	U	5.00	0.495 mg/L			12/10/21 17:41	1

Surrogate Summary

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
880-9013-D-1 MS	Matrix Spike	98	100	103	98
880-9161-1	MW-1	110	100	104	107
880-9161-2	MW-2	97	102	106	100
880-9161-2 - DL	MW-2	105	102	102	103
880-9163-B-5 MS	Matrix Spike	110	105	100	104
880-9163-B-5 MSD	Matrix Spike Duplicate	105	103	100	101
LCS 860-34007/3	Lab Control Sample	103	100	99	101
LCS 860-34093/3	Lab Control Sample	100	100	103	100
LCSD 860-34007/4	Lab Control Sample Dup	107	104	98	104
LCSD 860-34093/4	Lab Control Sample Dup	103	99	102	100
MB 860-34007/9	Method Blank	106	103	105	106
MB 860-34093/8	Method Blank	105	99	104	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-135)	OTPH1 (70-135)
880-9161-1	MW-1	119	128
880-9161-2	MW-2	112	120
LCS 860-34382/2-A	Lab Control Sample	136 S1+	112
LCSD 860-34382/3-A	Lab Control Sample Dup	129	100
MB 860-34382/1-A	Method Blank	111	118
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-34007/9

Matrix: Water

Analysis Batch: 34007

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/13/21 14:27	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/13/21 14:27	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/13/21 14:27	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/13/21 14:27	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/13/21 14:27	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/13/21 14:27	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/13/21 14:27	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/13/21 14:27	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/13/21 14:27	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/13/21 14:27	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/13/21 14:27	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/13/21 14:27	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/13/21 14:27	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/13/21 14:27	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/13/21 14:27	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/13/21 14:27	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/13/21 14:27	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/13/21 14:27	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/13/21 14:27	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/13/21 14:27	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/13/21 14:27	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/13/21 14:27	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/13/21 14:27	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/13/21 14:27	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/13/21 14:27	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/13/21 14:27	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/13/21 14:27	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/13/21 14:27	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/13/21 14:27	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/13/21 14:27	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/13/21 14:27	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/13/21 14:27	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/13/21 14:27	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/13/21 14:27	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/13/21 14:27	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/13/21 14:27	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/13/21 14:27	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/13/21 14:27	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/13/21 14:27	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/13/21 14:27	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/13/21 14:27	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/13/21 14:27	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/13/21 14:27	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/13/21 14:27	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/13/21 14:27	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/13/21 14:27	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/13/21 14:27	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/13/21 14:27	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-34007/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34007

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/13/21 14:27	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/13/21 14:27	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/13/21 14:27	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/13/21 14:27	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/13/21 14:27	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/13/21 14:27	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/13/21 14:27	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/13/21 14:27	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/13/21 14:27	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/13/21 14:27	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/13/21 14:27	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/13/21 14:27	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/13/21 14:27	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/13/21 14:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		74 - 124		12/13/21 14:27	1
Dibromofluoromethane (Surr)	103		75 - 131		12/13/21 14:27	1
1,2-Dichloroethane-d4 (Surr)	105		63 - 144		12/13/21 14:27	1
Toluene-d8 (Surr)	106		80 - 117		12/13/21 14:27	1

Lab Sample ID: LCS 860-34007/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34007

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.06040		mg/L		121	66 - 142
Bromobenzene	0.0500	0.05094		mg/L		102	75 - 125
Bromochloromethane	0.0500	0.05809		mg/L		116	60 - 140
Bromodichloromethane	0.0500	0.05956		mg/L		119	75 - 125
Bromoform	0.0500	0.05627		mg/L		113	75 - 125
Bromomethane	0.0500	0.05645		mg/L		113	60 - 140
2-Butanone	0.250	0.2887		mg/L		115	60 - 140
Carbon tetrachloride	0.0500	0.05542		mg/L		111	62 - 125
Chlorobenzene	0.0500	0.05597		mg/L		112	60 - 133
Chloroethane	0.0500	0.05925		mg/L		119	60 - 140
Chloroform	0.0500	0.05888		mg/L		118	70 - 130
Chloromethane	0.0500	0.04447		mg/L		89	60 - 140
2-Chlorotoluene	0.0500	0.05707		mg/L		114	73 - 125
4-Chlorotoluene	0.0500	0.05557		mg/L		111	74 - 125
cis-1,2-Dichloroethene	0.0500	0.06054		mg/L		121	75 - 125
cis-1,3-Dichloropropene	0.0500	0.06261		mg/L		125	74 - 125
Dibromochloromethane	0.0500	0.05748		mg/L		115	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05641		mg/L		113	59 - 125
1,2-Dibromoethane	0.0500	0.05809		mg/L		116	73 - 125
1,2-Dichlorobenzene	0.0500	0.05246		mg/L		105	75 - 125
1,3-Dichlorobenzene	0.0500	0.05345		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05096		mg/L		102	75 - 125

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-34007/3

Matrix: Water

Analysis Batch: 34007

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.03938		mg/L		79	70 - 130
1,1-Dichloroethane	0.0500	0.06231		mg/L		125	72 - 125
1,2-Dichloroethane	0.0500	0.05663		mg/L		113	68 - 127
1,1-Dichloroethene	0.0500	0.05422		mg/L		108	59 - 172
1,2-Dichloropropane	0.0500	0.06309	*+	mg/L		126	74 - 125
1,3-Dichloropropane	0.0500	0.06122		mg/L		122	75 - 125
2,2-Dichloropropane	0.0500	0.06093		mg/L		122	75 - 125
1,1-Dichloropropene	0.0500	0.06049		mg/L		121	75 - 125
Ethylbenzene	0.0500	0.05844		mg/L		117	75 - 125
Hexachlorobutadiene	0.0500	0.04727		mg/L		95	75 - 125
Isopropylbenzene	0.0500	0.05919		mg/L		118	75 - 125
Methylene Chloride	0.0500	0.05297		mg/L		106	75 - 125
m,p-Xylenes	0.0500	0.05679		mg/L		114	75 - 125
MTBE	0.0500	0.05666		mg/L		113	65 - 135
Naphthalene	0.0500	0.04982		mg/L		100	70 - 130
n-Butylbenzene	0.0500	0.05981		mg/L		120	75 - 125
N-Propylbenzene	0.0500	0.05812		mg/L		116	75 - 125
o-Xylene	0.0500	0.05669		mg/L		113	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05734		mg/L		115	75 - 125
sec-Butylbenzene	0.0500	0.05793		mg/L		116	75 - 125
Styrene	0.0500	0.06077		mg/L		122	75 - 125
tert-Butylbenzene	0.0500	0.05530		mg/L		111	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05793		mg/L		116	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.06013		mg/L		120	74 - 125
Tetrachloroethene	0.0500	0.05492		mg/L		110	71 - 125
Toluene	0.0500	0.05906		mg/L		118	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05709		mg/L		114	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05702		mg/L		114	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05021		mg/L		100	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05316		mg/L		106	75 - 135
1,1,1-Trichloroethane	0.0500	0.05700		mg/L		114	75 - 125
1,1,2-Trichloroethane	0.0500	0.05904		mg/L		118	75 - 127
Trichloroethene	0.0500	0.05362		mg/L		107	62 - 137
Trichlorofluoromethane	0.0500	0.03951		mg/L		79	60 - 140
1,2,3-Trichloropropane	0.0500	0.06099		mg/L		122	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05576		mg/L		112	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05513		mg/L		110	60 - 140
Vinyl chloride	0.0500	0.06885		mg/L		138	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	101		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-34007/4

Matrix: Water

Analysis Batch: 34007

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	0.05602		mg/L		112	66 - 142	8	25
Bromobenzene	0.0500	0.05177		mg/L		104	75 - 125	2	25
Bromochloromethane	0.0500	0.05779		mg/L		116	60 - 140	1	25
Bromodichloromethane	0.0500	0.05764		mg/L		115	75 - 125	3	25
Bromoform	0.0500	0.05741		mg/L		115	75 - 125	2	25
Bromomethane	0.0500	0.04965		mg/L		99	60 - 140	13	25
2-Butanone	0.250	0.2797		mg/L		112	60 - 140	3	25
Carbon tetrachloride	0.0500	0.05595		mg/L		112	62 - 125	1	25
Chlorobenzene	0.0500	0.05361		mg/L		107	60 - 133	4	25
Chloroethane	0.0500	0.05356		mg/L		107	60 - 140	10	25
Chloroform	0.0500	0.05551		mg/L		111	70 - 130	6	25
Chloromethane	0.0500	0.04155		mg/L		83	60 - 140	7	25
2-Chlorotoluene	0.0500	0.05737		mg/L		115	73 - 125	1	25
4-Chlorotoluene	0.0500	0.05651		mg/L		113	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.05920		mg/L		118	75 - 125	2	25
cis-1,3-Dichloropropene	0.0500	0.05921		mg/L		118	74 - 125	6	25
Dibromochloromethane	0.0500	0.05730		mg/L		115	73 - 125	0	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05933		mg/L		119	59 - 125	5	25
1,2-Dibromoethane	0.0500	0.05674		mg/L		113	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05315		mg/L		106	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.05337		mg/L		107	75 - 125	0	25
1,4-Dichlorobenzene	0.0500	0.05237		mg/L		105	75 - 125	3	25
Dichlorodifluoromethane	0.0500	0.03918		mg/L		78	70 - 130	0	25
1,1-Dichloroethane	0.0500	0.05989		mg/L		120	72 - 125	4	25
1,2-Dichloroethane	0.0500	0.05385		mg/L		108	68 - 127	5	25
1,1-Dichloroethene	0.0500	0.05451		mg/L		109	59 - 172	1	25
1,2-Dichloropropane	0.0500	0.05913		mg/L		118	74 - 125	6	25
1,3-Dichloropropane	0.0500	0.06005		mg/L		120	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.05889		mg/L		118	75 - 125	3	25
1,1-Dichloropropene	0.0500	0.05969		mg/L		119	75 - 125	1	25
Ethylbenzene	0.0500	0.05644		mg/L		113	75 - 125	3	25
Hexachlorobutadiene	0.0500	0.05198		mg/L		104	75 - 125	10	25
Isopropylbenzene	0.0500	0.05602		mg/L		112	75 - 125	6	25
Methylene Chloride	0.0500	0.05344		mg/L		107	75 - 125	1	25
m,p-Xylenes	0.0500	0.05514		mg/L		110	75 - 125	3	25
MTBE	0.0500	0.05691		mg/L		114	65 - 135	0	25
Naphthalene	0.0500	0.05149		mg/L		103	70 - 130	3	25
n-Butylbenzene	0.0500	0.05849		mg/L		117	75 - 125	2	25
N-Propylbenzene	0.0500	0.05828		mg/L		117	75 - 125	0	25
o-Xylene	0.0500	0.05534		mg/L		111	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05714		mg/L		114	75 - 125	0	25
sec-Butylbenzene	0.0500	0.05758		mg/L		115	75 - 125	1	25
Styrene	0.0500	0.05761		mg/L		115	75 - 125	5	25
tert-Butylbenzene	0.0500	0.05504		mg/L		110	75 - 125	0	25
1,1,1,2-Tetrachloroethane	0.0500	0.05600		mg/L		112	72 - 125	3	25
1,1,2,2-Tetrachloroethane	0.0500	0.06175		mg/L		123	74 - 125	3	25
Tetrachloroethene	0.0500	0.05406		mg/L		108	71 - 125	2	25
Toluene	0.0500	0.05700		mg/L		114	59 - 139	4	25

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-34007/4

Matrix: Water

Analysis Batch: 34007

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	0.05542		mg/L		111	75 - 125	3	25
trans-1,3-Dichloropropene	0.0500	0.05767		mg/L		115	66 - 125	1	25
1,2,3-Trichlorobenzene	0.0500	0.05177		mg/L		104	75 - 137	3	25
1,2,4-Trichlorobenzene	0.0500	0.05444		mg/L		109	75 - 135	2	25
1,1,1-Trichloroethane	0.0500	0.05434		mg/L		109	75 - 125	5	25
1,1,2-Trichloroethane	0.0500	0.05725		mg/L		114	75 - 127	3	25
Trichloroethene	0.0500	0.05214		mg/L		104	62 - 137	3	25
Trichlorofluoromethane	0.0500	0.03807		mg/L		76	60 - 140	4	25
1,2,3-Trichloropropane	0.0500	0.06288	*+	mg/L		126	75 - 125	3	25
1,2,4-Trimethylbenzene	0.0500	0.05432		mg/L		109	75 - 125	3	25
1,3,5-Trimethylbenzene	0.0500	0.05583		mg/L		112	60 - 140	1	25
Vinyl chloride	0.0500	0.05651		mg/L		113	60 - 140	20	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	107		74 - 124
Dibromofluoromethane (Surr)	104		75 - 131
1,2-Dichloroethane-d4 (Surr)	98		63 - 144
Toluene-d8 (Surr)	104		80 - 117

Lab Sample ID: MB 860-34093/8

Matrix: Water

Analysis Batch: 34093

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214	mg/L		12/14/21 13:14	1
Bromobenzene	<0.000300	U	0.00100	0.000300	mg/L		12/14/21 13:14	1
Bromochloromethane	<0.000209	U	0.00100	0.000209	mg/L		12/14/21 13:14	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231	mg/L		12/14/21 13:14	1
Bromoform	<0.000630	U	0.00500	0.000630	mg/L		12/14/21 13:14	1
Bromomethane	<0.00105	U	0.00500	0.00105	mg/L		12/14/21 13:14	1
2-Butanone	<0.00270	U	0.0500	0.00270	mg/L		12/14/21 13:14	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L		12/14/21 13:14	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L		12/14/21 13:14	1
Chloroethane	<0.000433	U	0.0100	0.000433	mg/L		12/14/21 13:14	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L		12/14/21 13:14	1
Chloromethane	<0.000318	U	0.0100	0.000318	mg/L		12/14/21 13:14	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214	mg/L		12/14/21 13:14	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183	mg/L		12/14/21 13:14	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174	mg/L		12/14/21 13:14	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690	mg/L		12/14/21 13:14	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739	mg/L		12/14/21 13:14	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319	mg/L		12/14/21 13:14	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337	mg/L		12/14/21 13:14	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236	mg/L		12/14/21 13:14	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197	mg/L		12/14/21 13:14	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199	mg/L		12/14/21 13:14	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316	mg/L		12/14/21 13:14	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244	mg/L		12/14/21 13:14	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-34093/8

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34093

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/14/21 13:14	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/14/21 13:14	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/14/21 13:14	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/14/21 13:14	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/14/21 13:14	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/14/21 13:14	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/14/21 13:14	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 13:14	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/14/21 13:14	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/14/21 13:14	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/14/21 13:14	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/14/21 13:14	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/14/21 13:14	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/14/21 13:14	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/14/21 13:14	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/14/21 13:14	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/14/21 13:14	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/14/21 13:14	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/14/21 13:14	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/14/21 13:14	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/14/21 13:14	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/14/21 13:14	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/14/21 13:14	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/14/21 13:14	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/14/21 13:14	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/14/21 13:14	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 13:14	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/14/21 13:14	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/14/21 13:14	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/14/21 13:14	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/14/21 13:14	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/14/21 13:14	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/14/21 13:14	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/14/21 13:14	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/14/21 13:14	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/14/21 13:14	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/14/21 13:14	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/14/21 13:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		74 - 124		12/14/21 13:14	1
Dibromofluoromethane (Surr)	99		75 - 131		12/14/21 13:14	1
1,2-Dichloroethane-d4 (Surr)	104		63 - 144		12/14/21 13:14	1
Toluene-d8 (Surr)	104		80 - 117		12/14/21 13:14	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-34093/3

Matrix: Water

Analysis Batch: 34093

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	0.05495		mg/L		110	66 - 142
Bromobenzene	0.0500	0.05661		mg/L		113	75 - 125
Bromochloromethane	0.0500	0.05114		mg/L		102	60 - 140
Bromodichloromethane	0.0500	0.04923		mg/L		98	75 - 125
Bromoform	0.0500	0.04812		mg/L		96	75 - 125
Bromomethane	0.0500	0.04906		mg/L		98	60 - 140
2-Butanone	0.250	0.2417		mg/L		97	60 - 140
Carbon tetrachloride	0.0500	0.04734		mg/L		95	62 - 125
Chlorobenzene	0.0500	0.05451		mg/L		109	60 - 133
Chloroethane	0.0500	0.04737		mg/L		95	60 - 140
Chloroform	0.0500	0.05588		mg/L		112	70 - 130
Chloromethane	0.0500	0.04873		mg/L		97	60 - 140
2-Chlorotoluene	0.0500	0.05532		mg/L		111	73 - 125
4-Chlorotoluene	0.0500	0.05488		mg/L		110	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05563		mg/L		111	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05540		mg/L		111	74 - 125
Dibromochloromethane	0.0500	0.05562		mg/L		111	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.05047		mg/L		101	59 - 125
1,2-Dibromoethane	0.0500	0.05513		mg/L		110	73 - 125
1,2-Dichlorobenzene	0.0500	0.05621		mg/L		112	75 - 125
1,3-Dichlorobenzene	0.0500	0.05624		mg/L		112	75 - 125
1,4-Dichlorobenzene	0.0500	0.05442		mg/L		109	75 - 125
Dichlorodifluoromethane	0.0500	0.04805		mg/L		96	70 - 130
1,1-Dichloroethane	0.0500	0.05514		mg/L		110	72 - 125
1,2-Dichloroethane	0.0500	0.05607		mg/L		112	68 - 127
1,1-Dichloroethene	0.0500	0.04953		mg/L		99	59 - 172
1,2-Dichloropropane	0.0500	0.05037		mg/L		101	74 - 125
1,3-Dichloropropane	0.0500	0.05501		mg/L		110	75 - 125
2,2-Dichloropropane	0.0500	0.05024		mg/L		100	75 - 125
1,1-Dichloropropene	0.0500	0.05573		mg/L		111	75 - 125
Ethylbenzene	0.0500	0.05379		mg/L		108	75 - 125
Hexachlorobutadiene	0.0500	0.06169		mg/L		123	75 - 125
Isopropylbenzene	0.0500	0.05403		mg/L		108	75 - 125
Methylene Chloride	0.0500	0.06101		mg/L		122	75 - 125
m,p-Xylenes	0.0500	0.05424		mg/L		108	75 - 125
MTBE	0.0500	0.05962		mg/L		119	65 - 135
Naphthalene	0.0500	0.05038		mg/L		101	70 - 130
n-Butylbenzene	0.0500	0.05878		mg/L		118	75 - 125
N-Propylbenzene	0.0500	0.05467		mg/L		109	75 - 125
o-Xylene	0.0500	0.05425		mg/L		109	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05682		mg/L		114	75 - 125
sec-Butylbenzene	0.0500	0.05556		mg/L		111	75 - 125
Styrene	0.0500	0.05607		mg/L		112	75 - 125
tert-Butylbenzene	0.0500	0.05495		mg/L		110	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05629		mg/L		113	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.05403		mg/L		108	74 - 125
Tetrachloroethene	0.0500	0.04803		mg/L		96	71 - 125
Toluene	0.0500	0.05446		mg/L		109	59 - 139

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-34093/3

Matrix: Water

Analysis Batch: 34093

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.0500	0.05406		mg/L		108	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05648		mg/L		113	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05243		mg/L		105	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05120		mg/L		102	75 - 135
1,1,1-Trichloroethane	0.0500	0.04836		mg/L		97	75 - 125
1,1,2-Trichloroethane	0.0500	0.05120		mg/L		102	75 - 127
Trichloroethene	0.0500	0.04841		mg/L		97	62 - 137
Trichlorofluoromethane	0.0500	0.05098		mg/L		102	60 - 140
1,2,3-Trichloropropane	0.0500	0.05495		mg/L		110	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05443		mg/L		109	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05446		mg/L		109	60 - 140
Vinyl chloride	0.0500	0.04723		mg/L		94	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	103		63 - 144
Toluene-d8 (Surr)	100		80 - 117

Lab Sample ID: LCSD 860-34093/4

Matrix: Water

Analysis Batch: 34093

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	0.05195		mg/L		104	66 - 142	6	25
Bromobenzene	0.0500	0.05457		mg/L		109	75 - 125	4	25
Bromochloromethane	0.0500	0.04856		mg/L		97	60 - 140	5	25
Bromodichloromethane	0.0500	0.04628		mg/L		93	75 - 125	6	25
Bromoform	0.0500	0.04445		mg/L		89	75 - 125	8	25
Bromomethane	0.0500	0.04998		mg/L		100	60 - 140	2	25
2-Butanone	0.250	0.2231		mg/L		89	60 - 140	8	25
Carbon tetrachloride	0.0500	0.04515		mg/L		90	62 - 125	5	25
Chlorobenzene	0.0500	0.05157		mg/L		103	60 - 133	6	25
Chloroethane	0.0500	0.04114		mg/L		82	60 - 140	14	25
Chloroform	0.0500	0.05279		mg/L		106	70 - 130	6	25
Chloromethane	0.0500	0.04958		mg/L		99	60 - 140	2	25
2-Chlorotoluene	0.0500	0.05378		mg/L		108	73 - 125	3	25
4-Chlorotoluene	0.0500	0.05306		mg/L		106	74 - 125	3	25
cis-1,2-Dichloroethene	0.0500	0.05282		mg/L		106	75 - 125	5	25
cis-1,3-Dichloropropene	0.0500	0.05253		mg/L		105	74 - 125	5	25
Dibromochloromethane	0.0500	0.05139		mg/L		103	73 - 125	8	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05083		mg/L		102	59 - 125	1	25
1,2-Dibromoethane	0.0500	0.05018		mg/L		100	73 - 125	9	25
1,2-Dichlorobenzene	0.0500	0.05467		mg/L		109	75 - 125	3	25
1,3-Dichlorobenzene	0.0500	0.05427		mg/L		109	75 - 125	4	25
1,4-Dichlorobenzene	0.0500	0.05302		mg/L		106	75 - 125	3	25
Dichlorodifluoromethane	0.0500	0.04978		mg/L		100	70 - 130	4	25
1,1-Dichloroethane	0.0500	0.05264		mg/L		105	72 - 125	5	25

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-34093/4

Matrix: Water

Analysis Batch: 34093

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
1,2-Dichloroethane	0.0500	0.05255		mg/L		105	68 - 127	6	25
1,1-Dichloroethene	0.0500	0.04787		mg/L		96	59 - 172	3	25
1,2-Dichloropropane	0.0500	0.04735		mg/L		95	74 - 125	6	25
1,3-Dichloropropane	0.0500	0.05075		mg/L		102	75 - 125	8	25
2,2-Dichloropropane	0.0500	0.04843		mg/L		97	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.05304		mg/L		106	75 - 125	5	25
Ethylbenzene	0.0500	0.05072		mg/L		101	75 - 125	6	25
Hexachlorobutadiene	0.0500	0.05704		mg/L		114	75 - 125	8	25
Isopropylbenzene	0.0500	0.05114		mg/L		102	75 - 125	5	25
Methylene Chloride	0.0500	0.04947		mg/L		99	75 - 125	21	25
m,p-Xylenes	0.0500	0.05090		mg/L		102	75 - 125	6	25
MTBE	0.0500	0.04576	*1	mg/L		92	65 - 135	26	25
Naphthalene	0.0500	0.05268		mg/L		105	70 - 130	4	25
n-Butylbenzene	0.0500	0.05714		mg/L		114	75 - 125	3	25
N-Propylbenzene	0.0500	0.05316		mg/L		106	75 - 125	3	25
o-Xylene	0.0500	0.05116		mg/L		102	75 - 125	6	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05472		mg/L		109	75 - 125	4	25
sec-Butylbenzene	0.0500	0.05420		mg/L		108	75 - 125	2	25
Styrene	0.0500	0.05265		mg/L		105	75 - 125	6	25
tert-Butylbenzene	0.0500	0.05337		mg/L		107	75 - 125	3	25
1,1,1,2-Tetrachloroethane	0.0500	0.05262		mg/L		105	72 - 125	7	25
1,1,2,2-Tetrachloroethane	0.0500	0.05171		mg/L		103	74 - 125	4	25
Tetrachloroethene	0.0500	0.04650		mg/L		93	71 - 125	3	25
Toluene	0.0500	0.05088		mg/L		102	59 - 139	7	25
trans-1,2-Dichloroethene	0.0500	0.04131	*1	mg/L		83	75 - 125	27	25
trans-1,3-Dichloropropene	0.0500	0.05205		mg/L		104	66 - 125	8	25
1,2,3-Trichlorobenzene	0.0500	0.05250		mg/L		105	75 - 137	0	25
1,2,4-Trichlorobenzene	0.0500	0.05092		mg/L		102	75 - 135	1	25
1,1,1-Trichloroethane	0.0500	0.04588		mg/L		92	75 - 125	5	25
1,1,2-Trichloroethane	0.0500	0.04737		mg/L		95	75 - 127	8	25
Trichloroethene	0.0500	0.04589		mg/L		92	62 - 137	5	25
Trichlorofluoromethane	0.0500	0.05226		mg/L		105	60 - 140	2	25
1,2,3-Trichloropropane	0.0500	0.05261		mg/L		105	75 - 125	4	25
1,2,4-Trimethylbenzene	0.0500	0.05280		mg/L		106	75 - 125	3	25
1,3,5-Trimethylbenzene	0.0500	0.05279		mg/L		106	60 - 140	3	25
Vinyl chloride	0.0500	0.04750		mg/L		95	60 - 140	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	102		63 - 144
Toluene-d8 (Surr)	100		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-34382/1-A

Matrix: Water

Analysis Batch: 34460

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34382

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		12/15/21 11:00	12/15/21 18:55	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		12/15/21 11:00	12/15/21 18:55	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		12/15/21 11:00	12/15/21 18:55	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 135			12/15/21 11:00	12/15/21 18:55	1
o-Terphenyl	118		70 - 135			12/15/21 11:00	12/15/21 18:55	1

Lab Sample ID: LCS 860-34382/2-A

Matrix: Water

Analysis Batch: 34460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	99.5	110.9		mg/L		111	70 - 135
Diesel Range Organics (Over C10-C28)	100	112.2		mg/L		112	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	136	S1+	70 - 135				
o-Terphenyl	112		70 - 135				

Lab Sample ID: LCSD 860-34382/3-A

Matrix: Water

Analysis Batch: 34460

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34382

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.5	120.5		mg/L		121	70 - 135	8	35
Diesel Range Organics (Over C10-C28)	100	116.3		mg/L		116	70 - 135	4	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	129		70 - 135						
o-Terphenyl	100		70 - 135						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-33512/3

Matrix: Water

Analysis Batch: 33512

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			12/08/21 21:44	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/08/21 21:44	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/08/21 21:44	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-33512/68

Matrix: Water

Analysis Batch: 33512

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			12/09/21 11:06	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/09/21 11:06	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/09/21 11:06	1

Lab Sample ID: LCS 860-33512/4

Matrix: Water

Analysis Batch: 33512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.61		mg/L		106	90 - 110
Fluoride	10.0	10.04		mg/L		100	90 - 110
Sulfate	10.0	9.696		mg/L		97	90 - 110

Lab Sample ID: LCS 860-33512/69

Matrix: Water

Analysis Batch: 33512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.62		mg/L		106	90 - 110
Fluoride	10.0	10.02		mg/L		100	90 - 110
Sulfate	10.0	9.697		mg/L		97	90 - 110

Lab Sample ID: LCSD 860-33512/5

Matrix: Water

Analysis Batch: 33512

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.29		mg/L		103	90 - 110	3	20
Fluoride	10.0	10.04		mg/L		100	90 - 110	0	20
Sulfate	10.0	9.647		mg/L		96	90 - 110	1	20

Lab Sample ID: LCSD 860-33512/70

Matrix: Water

Analysis Batch: 33512

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.30		mg/L		103	90 - 110	3	20
Fluoride	10.0	10.04		mg/L		100	90 - 110	0	20
Sulfate	10.0	9.672		mg/L		97	90 - 110	0	20

Lab Sample ID: MB 860-33513/3

Matrix: Water

Analysis Batch: 33513

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			12/08/21 21:44	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/08/21 21:44	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-33513/68

Matrix: Water

Analysis Batch: 33513

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			12/09/21 11:06	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/09/21 11:06	1

Lab Sample ID: LCS 860-33513/4

Matrix: Water

Analysis Batch: 33513

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	9.679		mg/L		97	80 - 120
Nitrite as N	5.00	5.114		mg/L		102	80 - 120

Lab Sample ID: LCS 860-33513/69

Matrix: Water

Analysis Batch: 33513

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	9.681		mg/L		97	80 - 120
Nitrite as N	5.00	5.118		mg/L		102	80 - 120

Lab Sample ID: LCSD 860-33513/5

Matrix: Water

Analysis Batch: 33513

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	9.673		mg/L		97	80 - 120	0	20
Nitrite as N	5.00	5.101		mg/L		102	80 - 120	0	20

Lab Sample ID: LCSD 860-33513/70

Matrix: Water

Analysis Batch: 33513

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	9.678		mg/L		97	80 - 120	0	20
Nitrite as N	5.00	5.105		mg/L		102	80 - 120	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-34086/39

Matrix: Water

Analysis Batch: 34086

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			12/13/21 18:30	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/13/21 18:30	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/13/21 18:30	1

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 860-34086/40

Matrix: Water

Analysis Batch: 34086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	250	235.7		mg/L		94	85 - 115

Lab Sample ID: LCSD 860-34086/41

Matrix: Water

Analysis Batch: 34086

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	237.3		mg/L		95	85 - 115	1	20

Lab Sample ID: 880-9161-1 DU

Matrix: Water

Analysis Batch: 34086

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	484		500.3		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	484		500.3		mg/L		3	20
Carbonate Alkalinity as CaCO3	<4.00	U	<4.00	U	mg/L		NC	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-34167/12

Matrix: Water

Analysis Batch: 34167

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			12/10/21 17:41	1

Lab Sample ID: LCS 860-34167/13

Matrix: Water

Analysis Batch: 34167

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	51.4	48.00		mg/L		93	80 - 120

Lab Sample ID: LCSD 860-34167/14

Matrix: Water

Analysis Batch: 34167

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	51.4	48.00		mg/L		93	80 - 120	0	20

Lab Sample ID: 880-9161-1 MS

Matrix: Water

Analysis Batch: 34167

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	51.4	49.40		mg/L		96	80 - 120

Eurofins Xenco, Midland

QC Sample Results

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

Job ID: 880-9161-1

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

Lab Sample ID: 880-9161-1 MSD							Client Sample ID: MW-1					
Matrix: Water							Prep Type: Total/NA					
Analysis Batch: 34167												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Sulfide	<0.495	U	51.4	49.60		mg/L		97	80 - 120	0	20	

QC Association Summary

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 34007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	8260C	
MB 860-34007/9	Method Blank	Total/NA	Water	8260C	
LCS 860-34007/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34007/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 34093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-2	MW-2	Total/NA	Water	8260C	
880-9161-2 - DL	MW-2	Total/NA	Water	8260C	
MB 860-34093/8	Method Blank	Total/NA	Water	8260C	
LCS 860-34093/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34093/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 32219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	8015 NM	
880-9161-2	MW-2	Total/NA	Water	8015 NM	

Prep Batch: 34382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-9161-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-34382/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-34382/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-34382/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 34460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	8015B NM	34382
880-9161-2	MW-2	Total/NA	Water	8015B NM	34382
MB 860-34382/1-A	Method Blank	Total/NA	Water	8015B NM	34382
LCS 860-34382/2-A	Lab Control Sample	Total/NA	Water	8015B NM	34382
LCSD 860-34382/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	34382

HPLC/IC

Analysis Batch: 33512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	300.0	
880-9161-2	MW-2	Total/NA	Water	300.0	
MB 860-33512/3	Method Blank	Total/NA	Water	300.0	
MB 860-33512/68	Method Blank	Total/NA	Water	300.0	
LCS 860-33512/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-33512/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33512/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-33512/70	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 33513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	300.0	

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

HPLC/IC (Continued)

Analysis Batch: 33513 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-2	MW-2	Total/NA	Water	300.0	
MB 860-33513/3	Method Blank	Total/NA	Water	300.0	
MB 860-33513/68	Method Blank	Total/NA	Water	300.0	
LCS 860-33513/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-33513/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-33513/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-33513/70	Lab Control Sample Dup	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 34027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-9161-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Analysis Batch: 34086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	SM 2320B	
880-9161-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-34086/39	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-34086/40	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-34086/41	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
880-9161-1 DU	MW-1	Total/NA	Water	SM 2320B	

Analysis Batch: 34167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-9161-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-34167/12	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-34167/13	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-34167/14	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-9161-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-9161-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 34226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 34246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9161-1	MW-1	Total/NA	Water	SM 4500 H+ B	

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum

Job ID: 880-9161-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9161-1

Date Collected: 12/08/21 09:40

Matrix: Water

Date Received: 12/08/21 16:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	34007	12/13/21 19:03	EM	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/16/21 09:26	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep			34382	12/15/21 11:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1	34460	12/15/21 19:13	T1S	XEN STF
Total/NA	Analysis	300.0		1	33512	12/09/21 13:46	WP	XEN STF
Total/NA	Analysis	300.0		1	33513	12/09/21 13:46	WP	XEN STF
Total/NA	Analysis	SM 2320B		1	34086	12/13/21 18:59	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	34027	12/13/21 15:23	AA	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	34246	12/14/21 16:17	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	34167	12/10/21 17:41	YVD	XEN STF

Client Sample ID: MW-2

Lab Sample ID: 880-9161-2

Date Collected: 12/08/21 12:30

Matrix: Water

Date Received: 12/08/21 16:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	34093	12/14/21 15:19	TTD	XEN STF
Total/NA	Analysis	8260C	DL	5	34093	12/14/21 16:00	TTD	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/16/21 09:26	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep			34382	12/15/21 11:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1	34460	12/15/21 19:31	T1S	XEN STF
Total/NA	Analysis	300.0		1	33512	12/09/21 14:13	WP	XEN STF
Total/NA	Analysis	300.0		1	33513	12/09/21 14:13	WP	XEN STF
Total/NA	Analysis	SM 2320B		1	34086	12/13/21 19:26	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	34027	12/13/21 15:23	AA	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	34226	12/14/21 15:35	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	34167	12/10/21 17:41	YVD	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Xenco, Midland

Accreditation/Certification Summary

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

Job ID: 880-9161-1

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

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)
8260C		Water	Total BTEX
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: 880-9161-1

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

Protocol References:

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

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

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-9161-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9161-1	MW-1	Water	12/08/21 09:40	12/08/21 16:46
880-9161-2	MW-2	Water	12/08/21 12:30	12/08/21 16:46

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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)565-3443 Lubbock, TX (806)784-1296
Phoenix, AZ (480-355-0800) Atlanta GA (770-449-5800) Tampa, FL (813) 251-1111
Hobbs NM (575-392-7550)



080-9161 Chain of Custody

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

Work Order Comments			
Program: UST/PST ☐ PRP ☐ Brownfields ☒ RCRA ☐ Superfund ☐ State of Project: <i>New Mexico</i> Reporting Level I ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐ Deliverables EDD ☐ ADAPT ☐ Other ☐			

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenoco 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 Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, 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
		12/8/14 10:42			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9161-1

Login Number: 9161

List Source: Eurofins Xenco, Midland

List Number: 1

Creator: Teel, Brianna

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9161-1

Login Number: 9161

List Source: Eurofins Xenco, Stafford

List Number: 2

List Creation: 12/09/21 11:19 AM

Creator: Palmar, Pedro

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9445-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

Authorized for release by:
12/23/2021 8:43:42 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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

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

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

Laboratory Job ID: 880-9445-1

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Definitions/Glossary

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

Job ID: 880-9445-1

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
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
H3	Sample was received and analyzed past holding time.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

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

Glossary

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

Definitions/Glossary

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

Job ID: 880-9445-1

Glossary (Continued)

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

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Case Narrative

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

Job ID: 880-9445-1

Job ID: 880-9445-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-9445-1

Receipt

The samples were received on 12/16/2021 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 1.6°C

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 860-34903 recovered outside control limits for the following analytes: 2,2-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-2 (880-9445-2), (880-9014-C-3), (880-9014-C-3 MS) and (880-9014-C-3 MSD). Elevated reporting limits (RLs) are provided.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 860-34903 were outside control limits: (880-9173-A-5 MS) and (880-9173-A-5 MSD).

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFMS: The following samples were received outside of holding time: MW-1 (880-9445-1) and MW-2 (880-9445-2).

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

General Chemistry

Method SM4500_S2_F: The following samples were received outside of holding time: MW-1 (880-9445-1) and MW-2 (880-9445-2).

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: 880-9445-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9445-1

Date Collected: 12/09/21 10:00

Matrix: Water

Date Received: 12/16/21 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/20/21 12:24	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/20/21 12:24	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/20/21 12:24	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/20/21 12:24	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/20/21 12:24	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/20/21 12:24	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/20/21 12:24	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/20/21 12:24	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/20/21 12:24	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/20/21 12:24	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/20/21 12:24	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/20/21 12:24	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/20/21 12:24	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/20/21 12:24	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/20/21 12:24	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/20/21 12:24	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/20/21 12:24	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/20/21 12:24	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/20/21 12:24	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/20/21 12:24	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/20/21 12:24	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 12:24	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/20/21 12:24	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/20/21 12:24	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/20/21 12:24	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/20/21 12:24	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/20/21 12:24	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/20/21 12:24	1
2,2-Dichloropropane	<0.000360	U *	0.00500	0.000360 mg/L			12/20/21 12:24	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/20/21 12:24	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/20/21 12:24	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 12:24	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/20/21 12:24	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/20/21 12:24	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 12:24	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/20/21 12:24	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/20/21 12:24	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/20/21 12:24	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/20/21 12:24	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/20/21 12:24	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/20/21 12:24	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 12:24	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/20/21 12:24	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/20/21 12:24	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/20/21 12:24	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/20/21 12:24	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 12:24	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 12:24	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/20/21 12:24	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9445-1

Date Collected: 12/09/21 10:00

Matrix: Water

Date Received: 12/16/21 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/20/21 12:24	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 12:24	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 12:24	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/20/21 12:24	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/20/21 12:24	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/20/21 12:24	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/20/21 12:24	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/20/21 12:24	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/20/21 12:24	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/20/21 12:24	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/20/21 12:24	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 12:24	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/20/21 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		12/20/21 12:24	1
Dibromofluoromethane (Surr)	105		75 - 131		12/20/21 12:24	1
1,2-Dichloroethane-d4 (Surr)	99		63 - 144		12/20/21 12:24	1
Toluene-d8 (Surr)	98		80 - 117		12/20/21 12:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<0.962	U	4.87	0.962 mg/L			12/21/21 09:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.962	U	4.87	0.962 mg/L		12/20/21 15:15	12/20/21 18:34	1
Diesel Range Organics (Over C10-C28)	<0.962	U	4.87	0.962 mg/L		12/20/21 15:15	12/20/21 18:34	1
Oil Range Organics (Over C28-C36)	<0.929	U	4.87	0.929 mg/L		12/20/21 15:15	12/20/21 18:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 135			12/20/21 15:15	12/20/21 18:34	1
o-Terphenyl	105		70 - 135			12/20/21 15:15	12/20/21 18:34	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	174		0.500	0.200 mg/L			12/17/21 16:34	1
Nitrate as N	0.143	H H3	0.100	0.0391 mg/L			12/17/21 16:34	1
Fluoride	0.504		0.500	0.100 mg/L			12/17/21 16:34	1
Nitrite as N	<0.0293	U H H3	0.100	0.0293 mg/L			12/17/21 16:34	1
Sulfate	49.9		0.500	0.109 mg/L			12/17/21 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	398		4.00	4.00 mg/L			12/17/21 18:55	1
Bicarbonate Alkalinity as CaCO3	398		4.00	4.00 mg/L			12/17/21 18:55	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/17/21 18:55	1
Carbon dioxide	420			mg/L			12/22/21 09:05	1
Carbon Dioxide, Free	69.3			mg/L			12/22/21 09:05	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9445-1

Date Collected: 12/09/21 10:00

Matrix: Water

Date Received: 12/16/21 15:22

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.9	HF		SU			12/20/21 16:11	1
Temperature	18.0	HF		Celsius			12/20/21 16:11	1
Sulfide	<0.495	U H	5.00	0.495 mg/L			12/17/21 16:56	1

Client Sample ID: MW-2

Lab Sample ID: 880-9445-2

Date Collected: 12/09/21 11:20

Matrix: Water

Date Received: 12/16/21 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0270		0.00100	0.000214 mg/L			12/20/21 12:43	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/20/21 12:43	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/20/21 12:43	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/20/21 12:43	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/20/21 12:43	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/20/21 12:43	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/20/21 12:43	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/20/21 12:43	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/20/21 12:43	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/20/21 12:43	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/20/21 12:43	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/20/21 12:43	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/20/21 12:43	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/20/21 12:43	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/20/21 12:43	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/20/21 12:43	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/20/21 12:43	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/20/21 12:43	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/20/21 12:43	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/20/21 12:43	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/20/21 12:43	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 12:43	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/20/21 12:43	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/20/21 12:43	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/20/21 12:43	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/20/21 12:43	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/20/21 12:43	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/20/21 12:43	1
2,2-Dichloropropane	<0.000360	U *	0.00500	0.000360 mg/L			12/20/21 12:43	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/20/21 12:43	1
Ethylbenzene	0.0225		0.00100	0.000515 mg/L			12/20/21 12:43	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 12:43	1
Isopropylbenzene	0.00712		0.00100	0.000161 mg/L			12/20/21 12:43	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/20/21 12:43	1
m,p-Xylenes	0.227		0.0500	0.00165 mg/L			12/20/21 16:19	5
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/20/21 12:43	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/20/21 12:43	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/20/21 12:43	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/20/21 12:43	1
o-Xylene	0.0129		0.00100	0.000192 mg/L			12/20/21 12:43	1

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Client Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-9445-2

Date Collected: 12/09/21 11:20

Matrix: Water

Date Received: 12/16/21 15:22

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
p-Cymene (p-Isopropyltoluene)	0.000875	J	0.00100	0.000233	mg/L		12/20/21 12:43	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199	mg/L		12/20/21 12:43	1
Styrene	<0.000623	U	0.00100	0.000623	mg/L		12/20/21 12:43	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195	mg/L		12/20/21 12:43	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327	mg/L		12/20/21 12:43	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284	mg/L		12/20/21 12:43	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500	mg/L		12/20/21 12:43	1
Toluene	0.00490		0.00100	0.000500	mg/L		12/20/21 12:43	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256	mg/L		12/20/21 12:43	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752	mg/L		12/20/21 12:43	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200	mg/L		12/20/21 12:43	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200	mg/L		12/20/21 12:43	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504	mg/L		12/20/21 12:43	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228	mg/L		12/20/21 12:43	1
Trichloroethene	<0.000424	U	0.00500	0.000424	mg/L		12/20/21 12:43	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245	mg/L		12/20/21 12:43	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283	mg/L		12/20/21 12:43	1
1,2,4-Trimethylbenzene	0.0396		0.00100	0.000252	mg/L		12/20/21 12:43	1
1,3,5-Trimethylbenzene	0.00959		0.00100	0.000279	mg/L		12/20/21 12:43	1
Vinyl chloride	<0.000234	U	0.00200	0.000234	mg/L		12/20/21 12:43	1
Xylenes, Total	0.249		0.0500	0.00165	mg/L		12/20/21 16:19	5
Total BTEX	0.336		0.0500	0.00500	mg/L		12/20/21 16:19	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		12/20/21 12:43	1
4-Bromofluorobenzene (Surr)	99		74 - 124		12/20/21 16:19	5
Dibromofluoromethane (Surr)	107		75 - 131		12/20/21 12:43	1
Dibromofluoromethane (Surr)	99		75 - 131		12/20/21 16:19	5
1,2-Dichloroethane-d4 (Surr)	101		63 - 144		12/20/21 12:43	1
1,2-Dichloroethane-d4 (Surr)	95		63 - 144		12/20/21 16:19	5
Toluene-d8 (Surr)	99		80 - 117		12/20/21 12:43	1
Toluene-d8 (Surr)	100		80 - 117		12/20/21 16:19	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.15	J	4.79	0.947	mg/L		12/21/21 09:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.15	J	4.79	0.947	mg/L	12/20/21 15:15	12/20/21 19:09	1
Diesel Range Organics (Over C10-C28)	<0.947	U	4.79	0.947	mg/L	12/20/21 15:15	12/20/21 19:09	1
Oil Range Organics (Over C28-C36)	<0.914	U	4.79	0.914	mg/L	12/20/21 15:15	12/20/21 19:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 135			12/20/21 15:15	12/20/21 19:09	1
o-Terphenyl	105		70 - 135			12/20/21 15:15	12/20/21 19:09	1

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Client Sample Results

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

Job ID: 880-9445-1

Client Sample ID: MW-2
Date Collected: 12/09/21 11:20
Date Received: 12/16/21 15:22

Lab Sample ID: 880-9445-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		0.500	0.200	mg/L			12/17/21 16:43	1
Nitrate as N	0.529	H H3	0.100	0.0391	mg/L			12/17/21 16:43	1
Fluoride	<0.100	U	0.500	0.100	mg/L			12/17/21 16:43	1
Nitrite as N	<0.0293	U H H3	0.100	0.0293	mg/L			12/17/21 16:43	1
Sulfate	113		0.500	0.109	mg/L			12/17/21 16:43	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1180		4.00	4.00	mg/L			12/17/21 19:12	1
Bicarbonate Alkalinity as CaCO3	1180		4.00	4.00	mg/L			12/17/21 19:12	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			12/17/21 19:12	1
Carbon dioxide	1990				mg/L			12/22/21 09:05	1
Carbon Dioxide, Free	957				mg/L			12/22/21 09:05	1
pH	6.3	HF			SU			12/20/21 16:11	1
Temperature	18.0	HF			Celsius			12/20/21 16:11	1
Sulfide	<0.495	U H	5.00	0.495	mg/L			12/17/21 16:56	1

Surrogate Summary

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

Job ID: 880-9445-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
880-9014-C-3 MS	Matrix Spike	97	97	93	98
880-9014-C-3 MSD	Matrix Spike Duplicate	99	99	91	99
880-9173-A-5 MS	Matrix Spike	99	111	102	98
880-9173-A-5 MSD	Matrix Spike Duplicate	105	110	101	97
880-9445-1	MW-1	101	105	99	98
880-9445-2	MW-2	99	99	95	100
880-9445-2	MW-2	100	107	101	99
LCS 860-34902/3	Lab Control Sample	99	99	92	99
LCS 860-34903/3	Lab Control Sample	101	106	101	100
LCSD 860-34902/4	Lab Control Sample Dup	99	98	93	99
LCSD 860-34903/4	Lab Control Sample Dup	105	109	99	97
MB 860-34902/9	Method Blank	101	101	95	102
MB 860-34903/9	Method Blank	101	108	99	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)
880-9445-1	MW-1	98	105
880-9445-1 MS	MW-1	105	87
880-9445-2	MW-2	98	105
LCS 860-35032/2-A	Lab Control Sample	108	90
LCSD 860-35032/3-A	Lab Control Sample Dup	103	87
MB 860-35032/1-A	Method Blank	93	98
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-34902/9

Matrix: Water

Analysis Batch: 34902

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/20/21 10:21	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/20/21 10:21	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/20/21 10:21	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/20/21 10:21	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/20/21 10:21	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/20/21 10:21	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/20/21 10:21	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/20/21 10:21	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/20/21 10:21	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/20/21 10:21	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/20/21 10:21	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/20/21 10:21	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/20/21 10:21	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/20/21 10:21	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/20/21 10:21	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/20/21 10:21	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/20/21 10:21	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/20/21 10:21	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/20/21 10:21	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/20/21 10:21	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/20/21 10:21	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 10:21	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/20/21 10:21	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/20/21 10:21	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/20/21 10:21	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/20/21 10:21	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/20/21 10:21	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/20/21 10:21	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/20/21 10:21	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/20/21 10:21	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/20/21 10:21	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:21	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/20/21 10:21	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/20/21 10:21	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 10:21	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/20/21 10:21	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/20/21 10:21	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/20/21 10:21	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/20/21 10:21	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/20/21 10:21	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/20/21 10:21	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 10:21	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/20/21 10:21	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/20/21 10:21	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/20/21 10:21	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/20/21 10:21	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 10:21	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 10:21	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-34902/9

Matrix: Water

Analysis Batch: 34902

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	<0.000256	U	0.00100	0.000256 mg/L			12/20/21 10:21	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/20/21 10:21	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:21	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:21	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/20/21 10:21	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/20/21 10:21	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/20/21 10:21	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/20/21 10:21	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/20/21 10:21	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/20/21 10:21	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/20/21 10:21	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/20/21 10:21	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 10:21	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/20/21 10:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		12/20/21 10:21	1
Dibromofluoromethane (Surr)	101		75 - 131		12/20/21 10:21	1
1,2-Dichloroethane-d4 (Surr)	95		63 - 144		12/20/21 10:21	1
Toluene-d8 (Surr)	102		80 - 117		12/20/21 10:21	1

Lab Sample ID: LCS 860-34902/3

Matrix: Water

Analysis Batch: 34902

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	0.05424		mg/L		108	66 - 142
Bromobenzene	0.0500	0.05294		mg/L		106	75 - 125
Bromochloromethane	0.0500	0.05295		mg/L		106	60 - 140
Bromodichloromethane	0.0500	0.05238		mg/L		105	75 - 125
Bromoform	0.0500	0.04990		mg/L		100	75 - 125
Bromomethane	0.0500	0.04259		mg/L		85	60 - 140
2-Butanone	0.250	0.2292		mg/L		92	60 - 140
Carbon tetrachloride	0.0500	0.05555		mg/L		111	62 - 125
Chlorobenzene	0.0500	0.05365		mg/L		107	60 - 133
Chloroethane	0.0500	0.05302		mg/L		106	60 - 140
Chloroform	0.0500	0.05265		mg/L		105	70 - 130
Chloromethane	0.0500	0.04816		mg/L		96	60 - 140
2-Chlorotoluene	0.0500	0.05417		mg/L		108	73 - 125
4-Chlorotoluene	0.0500	0.05461		mg/L		109	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05424		mg/L		108	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05416		mg/L		108	74 - 125
Dibromochloromethane	0.0500	0.05145		mg/L		103	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04700		mg/L		94	59 - 125
1,2-Dibromoethane	0.0500	0.04919		mg/L		98	73 - 125
1,2-Dichlorobenzene	0.0500	0.05233		mg/L		105	75 - 125
1,3-Dichlorobenzene	0.0500	0.05441		mg/L		109	75 - 125
1,4-Dichlorobenzene	0.0500	0.05288		mg/L		106	75 - 125

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-34902/3

Matrix: Water

Analysis Batch: 34902

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.05953		mg/L		119	70 - 130
1,1-Dichloroethane	0.0500	0.05400		mg/L		108	72 - 125
1,2-Dichloroethane	0.0500	0.04910		mg/L		98	68 - 127
1,1-Dichloroethene	0.0500	0.05207		mg/L		104	59 - 172
1,2-Dichloropropane	0.0500	0.05447		mg/L		109	74 - 125
1,3-Dichloropropane	0.0500	0.04996		mg/L		100	75 - 125
2,2-Dichloropropane	0.0500	0.05904		mg/L		118	75 - 125
1,1-Dichloropropene	0.0500	0.05581		mg/L		112	75 - 125
Ethylbenzene	0.0500	0.05476		mg/L		110	75 - 125
Hexachlorobutadiene	0.0500	0.05634		mg/L		113	75 - 125
Isopropylbenzene	0.0500	0.05039		mg/L		101	75 - 125
Methylene Chloride	0.0500	0.05107		mg/L		102	75 - 125
m,p-Xylenes	0.0500	0.05486		mg/L		110	75 - 125
MTBE	0.0500	0.05026		mg/L		101	65 - 135
Naphthalene	0.0500	0.04956		mg/L		99	70 - 130
n-Butylbenzene	0.0500	0.05726		mg/L		115	75 - 125
N-Propylbenzene	0.0500	0.05615		mg/L		112	75 - 125
o-Xylene	0.0500	0.05474		mg/L		109	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05846		mg/L		117	75 - 125
sec-Butylbenzene	0.0500	0.05822		mg/L		116	75 - 125
Styrene	0.0500	0.05550		mg/L		111	75 - 125
tert-Butylbenzene	0.0500	0.05645		mg/L		113	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05294		mg/L		106	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04899		mg/L		98	74 - 125
Tetrachloroethene	0.0500	0.05430		mg/L		109	71 - 125
Toluene	0.0500	0.05323		mg/L		106	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05440		mg/L		109	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05165		mg/L		103	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05086		mg/L		102	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05142		mg/L		103	75 - 135
1,1,1-Trichloroethane	0.0500	0.05387		mg/L		108	75 - 125
1,1,2-Trichloroethane	0.0500	0.05088		mg/L		102	75 - 127
Trichloroethene	0.0500	0.05499		mg/L		110	62 - 137
Trichlorofluoromethane	0.0500	0.06365		mg/L		127	60 - 140
1,2,3-Trichloropropane	0.0500	0.04941		mg/L		99	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05674		mg/L		113	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05627		mg/L		113	60 - 140
Vinyl chloride	0.0500	0.05662		mg/L		113	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	92		63 - 144
Toluene-d8 (Surr)	99		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-34902/4

Matrix: Water

Analysis Batch: 34902

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	0.05362		mg/L		107	66 - 142	1	25
Bromobenzene	0.0500	0.05256		mg/L		105	75 - 125	1	25
Bromochloromethane	0.0500	0.05207		mg/L		104	60 - 140	2	25
Bromodichloromethane	0.0500	0.05164		mg/L		103	75 - 125	1	25
Bromoform	0.0500	0.05209		mg/L		104	75 - 125	4	25
Bromomethane	0.0500	0.04871		mg/L		97	60 - 140	13	25
2-Butanone	0.250	0.2629		mg/L		105	60 - 140	14	25
Carbon tetrachloride	0.0500	0.05384		mg/L		108	62 - 125	3	25
Chlorobenzene	0.0500	0.05332		mg/L		107	60 - 133	1	25
Chloroethane	0.0500	0.05033		mg/L		101	60 - 140	5	25
Chloroform	0.0500	0.05212		mg/L		104	70 - 130	1	25
Chloromethane	0.0500	0.04759		mg/L		95	60 - 140	1	25
2-Chlorotoluene	0.0500	0.05314		mg/L		106	73 - 125	2	25
4-Chlorotoluene	0.0500	0.05383		mg/L		108	74 - 125	1	25
cis-1,2-Dichloroethene	0.0500	0.05262		mg/L		105	75 - 125	3	25
cis-1,3-Dichloropropene	0.0500	0.05354		mg/L		107	74 - 125	1	25
Dibromochloromethane	0.0500	0.05285		mg/L		106	73 - 125	3	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05282		mg/L		106	59 - 125	12	25
1,2-Dibromoethane	0.0500	0.05141		mg/L		103	73 - 125	4	25
1,2-Dichlorobenzene	0.0500	0.05269		mg/L		105	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.05352		mg/L		107	75 - 125	2	25
1,4-Dichlorobenzene	0.0500	0.05204		mg/L		104	75 - 125	2	25
Dichlorodifluoromethane	0.0500	0.05698		mg/L		114	70 - 130	4	25
1,1-Dichloroethane	0.0500	0.05229		mg/L		105	72 - 125	3	25
1,2-Dichloroethane	0.0500	0.04872		mg/L		97	68 - 127	1	25
1,1-Dichloroethene	0.0500	0.05036		mg/L		101	59 - 172	3	25
1,2-Dichloropropane	0.0500	0.05303		mg/L		106	74 - 125	3	25
1,3-Dichloropropane	0.0500	0.05124		mg/L		102	75 - 125	3	25
2,2-Dichloropropane	0.0500	0.05749		mg/L		115	75 - 125	3	25
1,1-Dichloropropene	0.0500	0.05451		mg/L		109	75 - 125	2	25
Ethylbenzene	0.0500	0.05439		mg/L		109	75 - 125	1	25
Hexachlorobutadiene	0.0500	0.05757		mg/L		115	75 - 125	2	25
Isopropylbenzene	0.0500	0.05004		mg/L		100	75 - 125	1	25
Methylene Chloride	0.0500	0.04993		mg/L		100	75 - 125	2	25
m,p-Xylenes	0.0500	0.05448		mg/L		109	75 - 125	1	25
MTBE	0.0500	0.05191		mg/L		104	65 - 135	3	25
Naphthalene	0.0500	0.05584		mg/L		112	70 - 130	12	25
n-Butylbenzene	0.0500	0.05692		mg/L		114	75 - 125	1	25
N-Propylbenzene	0.0500	0.05496		mg/L		110	75 - 125	2	25
o-Xylene	0.0500	0.05431		mg/L		109	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05772		mg/L		115	75 - 125	1	25
sec-Butylbenzene	0.0500	0.05737		mg/L		115	75 - 125	1	25
Styrene	0.0500	0.05482		mg/L		110	75 - 125	1	25
tert-Butylbenzene	0.0500	0.05559		mg/L		111	75 - 125	2	25
1,1,1,2-Tetrachloroethane	0.0500	0.05329		mg/L		107	72 - 125	1	25
1,1,2,2-Tetrachloroethane	0.0500	0.05205		mg/L		104	74 - 125	6	25
Tetrachloroethene	0.0500	0.05383		mg/L		108	71 - 125	1	25
Toluene	0.0500	0.05246		mg/L		105	59 - 139	1	25

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-34902/4

Matrix: Water

Analysis Batch: 34902

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	0.05185		mg/L		104	75 - 125	5	25
trans-1,3-Dichloropropene	0.0500	0.05291		mg/L		106	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.05601		mg/L		112	75 - 137	10	25
1,2,4-Trichlorobenzene	0.0500	0.05420		mg/L		108	75 - 135	5	25
1,1,1-Trichloroethane	0.0500	0.05268		mg/L		105	75 - 125	2	25
1,1,2-Trichloroethane	0.0500	0.05227		mg/L		105	75 - 127	3	25
Trichloroethene	0.0500	0.05329		mg/L		107	62 - 137	3	25
Trichlorofluoromethane	0.0500	0.05934		mg/L		119	60 - 140	7	25
1,2,3-Trichloropropane	0.0500	0.05274		mg/L		105	75 - 125	7	25
1,2,4-Trimethylbenzene	0.0500	0.05585		mg/L		112	75 - 125	2	25
1,3,5-Trimethylbenzene	0.0500	0.05604		mg/L		112	60 - 140	0	25
Vinyl chloride	0.0500	0.05375		mg/L		108	60 - 140	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		74 - 124
Dibromofluoromethane (Surr)	98		75 - 131
1,2-Dichloroethane-d4 (Surr)	93		63 - 144
Toluene-d8 (Surr)	99		80 - 117

Lab Sample ID: MB 860-34903/9

Matrix: Water

Analysis Batch: 34903

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214	mg/L		12/20/21 10:30	1
Bromobenzene	<0.000300	U	0.00100	0.000300	mg/L		12/20/21 10:30	1
Bromochloromethane	<0.000209	U	0.00100	0.000209	mg/L		12/20/21 10:30	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231	mg/L		12/20/21 10:30	1
Bromoform	<0.000630	U	0.00500	0.000630	mg/L		12/20/21 10:30	1
Bromomethane	<0.00105	U	0.00500	0.00105	mg/L		12/20/21 10:30	1
2-Butanone	<0.00270	U	0.0500	0.00270	mg/L		12/20/21 10:30	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423	mg/L		12/20/21 10:30	1
Chlorobenzene	<0.000159	U	0.00100	0.000159	mg/L		12/20/21 10:30	1
Chloroethane	<0.000433	U	0.0100	0.000433	mg/L		12/20/21 10:30	1
Chloroform	<0.000259	U	0.00100	0.000259	mg/L		12/20/21 10:30	1
Chloromethane	<0.000318	U	0.0100	0.000318	mg/L		12/20/21 10:30	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214	mg/L		12/20/21 10:30	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183	mg/L		12/20/21 10:30	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174	mg/L		12/20/21 10:30	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690	mg/L		12/20/21 10:30	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739	mg/L		12/20/21 10:30	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319	mg/L		12/20/21 10:30	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337	mg/L		12/20/21 10:30	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236	mg/L		12/20/21 10:30	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197	mg/L		12/20/21 10:30	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199	mg/L		12/20/21 10:30	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316	mg/L		12/20/21 10:30	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244	mg/L		12/20/21 10:30	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-34903/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34903

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/20/21 10:30	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/20/21 10:30	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/20/21 10:30	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/20/21 10:30	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/20/21 10:30	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/20/21 10:30	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/20/21 10:30	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:30	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/20/21 10:30	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/20/21 10:30	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 10:30	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/20/21 10:30	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/20/21 10:30	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/20/21 10:30	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/20/21 10:30	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/20/21 10:30	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/20/21 10:30	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/20/21 10:30	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/20/21 10:30	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/20/21 10:30	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/20/21 10:30	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/20/21 10:30	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 10:30	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/20/21 10:30	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/20/21 10:30	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/20/21 10:30	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:30	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/20/21 10:30	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/20/21 10:30	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/20/21 10:30	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/20/21 10:30	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/20/21 10:30	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/20/21 10:30	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/20/21 10:30	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/20/21 10:30	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/20/21 10:30	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/20/21 10:30	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/20/21 10:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		12/20/21 10:30	1
Dibromofluoromethane (Surr)	108		75 - 131		12/20/21 10:30	1
1,2-Dichloroethane-d4 (Surr)	99		63 - 144		12/20/21 10:30	1
Toluene-d8 (Surr)	100		80 - 117		12/20/21 10:30	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-34903/3

Matrix: Water

Analysis Batch: 34903

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec. Limits
	Added	Result	Qualifier				
Benzene	0.0500	0.05375		mg/L		107	66 - 142
Bromobenzene	0.0500	0.05292		mg/L		106	75 - 125
Bromochloromethane	0.0500	0.05378		mg/L		108	60 - 140
Bromodichloromethane	0.0500	0.05369		mg/L		107	75 - 125
Bromoform	0.0500	0.04538		mg/L		91	75 - 125
Bromomethane	0.0500	0.04849		mg/L		97	60 - 140
2-Butanone	0.250	0.2580		mg/L		103	60 - 140
Carbon tetrachloride	0.0500	0.05744		mg/L		115	62 - 125
Chlorobenzene	0.0500	0.05529		mg/L		111	60 - 133
Chloroethane	0.0500	0.04920		mg/L		98	60 - 140
Chloroform	0.0500	0.05631		mg/L		113	70 - 130
Chloromethane	0.0500	0.03835		mg/L		77	60 - 140
2-Chlorotoluene	0.0500	0.05593		mg/L		112	73 - 125
4-Chlorotoluene	0.0500	0.05519		mg/L		110	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04915		mg/L		98	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05300		mg/L		106	74 - 125
Dibromochloromethane	0.0500	0.04703		mg/L		94	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04654		mg/L		93	59 - 125
1,2-Dibromoethane	0.0500	0.04883		mg/L		98	73 - 125
1,2-Dichlorobenzene	0.0500	0.05534		mg/L		111	75 - 125
1,3-Dichlorobenzene	0.0500	0.05496		mg/L		110	75 - 125
1,4-Dichlorobenzene	0.0500	0.05593		mg/L		112	75 - 125
Dichlorodifluoromethane	0.0500	0.04339		mg/L		87	70 - 130
1,1-Dichloroethane	0.0500	0.05272		mg/L		105	72 - 125
1,2-Dichloroethane	0.0500	0.05531		mg/L		111	68 - 127
1,1-Dichloroethene	0.0500	0.04890		mg/L		98	59 - 172
1,2-Dichloropropane	0.0500	0.05326		mg/L		107	74 - 125
1,3-Dichloropropane	0.0500	0.05289		mg/L		106	75 - 125
2,2-Dichloropropane	0.0500	0.06359	*+	mg/L		127	75 - 125
1,1-Dichloropropene	0.0500	0.05599		mg/L		112	75 - 125
Ethylbenzene	0.0500	0.05546		mg/L		111	75 - 125
Hexachlorobutadiene	0.0500	0.05174		mg/L		103	75 - 125
Isopropylbenzene	0.0500	0.05589		mg/L		112	75 - 125
Methylene Chloride	0.0500	0.04974		mg/L		99	75 - 125
m,p-Xylenes	0.0500	0.05561		mg/L		111	75 - 125
MTBE	0.0500	0.05305		mg/L		106	65 - 135
Naphthalene	0.0500	0.04829		mg/L		97	70 - 130
n-Butylbenzene	0.0500	0.05794		mg/L		116	75 - 125
N-Propylbenzene	0.0500	0.05631		mg/L		113	75 - 125
o-Xylene	0.0500	0.05577		mg/L		112	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05782		mg/L		116	75 - 125
sec-Butylbenzene	0.0500	0.05668		mg/L		113	75 - 125
Styrene	0.0500	0.05189		mg/L		104	75 - 125
tert-Butylbenzene	0.0500	0.05608		mg/L		112	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04963		mg/L		99	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04969		mg/L		99	74 - 125
Tetrachloroethene	0.0500	0.05738		mg/L		115	71 - 125
Toluene	0.0500	0.05458		mg/L		109	59 - 139

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-34903/3

Matrix: Water

Analysis Batch: 34903

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	0.0500	0.05048		mg/L		101	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05156		mg/L		103	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04754		mg/L		95	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.04407		mg/L		88	75 - 135
1,1,1-Trichloroethane	0.0500	0.05878		mg/L		118	75 - 125
1,1,2-Trichloroethane	0.0500	0.05256		mg/L		105	75 - 127
Trichloroethene	0.0500	0.05317		mg/L		106	62 - 137
Trichlorofluoromethane	0.0500	0.05209		mg/L		104	60 - 140
1,2,3-Trichloropropane	0.0500	0.04999		mg/L		100	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05602		mg/L		112	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05655		mg/L		113	60 - 140
Vinyl chloride	0.0500	0.04241		mg/L		85	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	106		75 - 131
1,2-Dichloroethane-d4 (Surr)	101		63 - 144
Toluene-d8 (Surr)	100		80 - 117

Lab Sample ID: LCSD 860-34903/4

Matrix: Water

Analysis Batch: 34903

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	0.05570		mg/L		111	66 - 142	4	25
Bromobenzene	0.0500	0.05569		mg/L		111	75 - 125	5	25
Bromochloromethane	0.0500	0.05849		mg/L		117	60 - 140	8	25
Bromodichloromethane	0.0500	0.05443		mg/L		109	75 - 125	1	25
Bromoform	0.0500	0.04759		mg/L		95	75 - 125	5	25
Bromomethane	0.0500	0.05218		mg/L		104	60 - 140	7	25
2-Butanone	0.250	0.2503		mg/L		100	60 - 140	3	25
Carbon tetrachloride	0.0500	0.06076		mg/L		122	62 - 125	6	25
Chlorobenzene	0.0500	0.05585		mg/L		112	60 - 133	1	25
Chloroethane	0.0500	0.05522		mg/L		110	60 - 140	12	25
Chloroform	0.0500	0.06041		mg/L		121	70 - 130	7	25
Chloromethane	0.0500	0.04088		mg/L		82	60 - 140	6	25
2-Chlorotoluene	0.0500	0.06004		mg/L		120	73 - 125	7	25
4-Chlorotoluene	0.0500	0.05783		mg/L		116	74 - 125	5	25
cis-1,2-Dichloroethene	0.0500	0.05219		mg/L		104	75 - 125	6	25
cis-1,3-Dichloropropene	0.0500	0.05585		mg/L		112	74 - 125	5	25
Dibromochloromethane	0.0500	0.04804		mg/L		96	73 - 125	2	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04917		mg/L		98	59 - 125	6	25
1,2-Dibromoethane	0.0500	0.04709		mg/L		94	73 - 125	4	25
1,2-Dichlorobenzene	0.0500	0.05823		mg/L		116	75 - 125	5	25
1,3-Dichlorobenzene	0.0500	0.05924		mg/L		118	75 - 125	7	25
1,4-Dichlorobenzene	0.0500	0.05801		mg/L		116	75 - 125	4	25
Dichlorodifluoromethane	0.0500	0.04296		mg/L		86	70 - 130	1	25
1,1-Dichloroethane	0.0500	0.05574		mg/L		111	72 - 125	6	25

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QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-34903/4

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 34903

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	0.0500	0.05459		mg/L		109	68 - 127	1	25
1,1-Dichloroethene	0.0500	0.05305		mg/L		106	59 - 172	8	25
1,2-Dichloropropane	0.0500	0.05304		mg/L		106	74 - 125	0	25
1,3-Dichloropropane	0.0500	0.05325		mg/L		106	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.06634	*+	mg/L		133	75 - 125	4	25
1,1-Dichloropropene	0.0500	0.06022		mg/L		120	75 - 125	7	25
Ethylbenzene	0.0500	0.05755		mg/L		115	75 - 125	4	25
Hexachlorobutadiene	0.0500	0.05734		mg/L		115	75 - 125	10	25
Isopropylbenzene	0.0500	0.05740		mg/L		115	75 - 125	3	25
Methylene Chloride	0.0500	0.05094		mg/L		102	75 - 125	2	25
m,p-Xylenes	0.0500	0.05687		mg/L		114	75 - 125	2	25
MTBE	0.0500	0.05628		mg/L		113	65 - 135	6	25
Naphthalene	0.0500	0.05597		mg/L		112	70 - 130	15	25
n-Butylbenzene	0.0500	0.06235		mg/L		125	75 - 125	7	25
N-Propylbenzene	0.0500	0.06001		mg/L		120	75 - 125	6	25
o-Xylene	0.0500	0.05634		mg/L		113	75 - 125	1	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.06066		mg/L		121	75 - 125	5	25
sec-Butylbenzene	0.0500	0.06030		mg/L		121	75 - 125	6	25
Styrene	0.0500	0.05105		mg/L		102	75 - 125	2	25
tert-Butylbenzene	0.0500	0.06083		mg/L		122	75 - 125	8	25
1,1,1,2-Tetrachloroethane	0.0500	0.05066		mg/L		101	72 - 125	2	25
1,1,2,2-Tetrachloroethane	0.0500	0.05431		mg/L		109	74 - 125	9	25
Tetrachloroethene	0.0500	0.05620		mg/L		112	71 - 125	2	25
Toluene	0.0500	0.05625		mg/L		112	59 - 139	3	25
trans-1,2-Dichloroethene	0.0500	0.05287		mg/L		106	75 - 125	5	25
trans-1,3-Dichloropropene	0.0500	0.05503		mg/L		110	66 - 125	7	25
1,2,3-Trichlorobenzene	0.0500	0.05128		mg/L		103	75 - 137	8	25
1,2,4-Trichlorobenzene	0.0500	0.04925		mg/L		98	75 - 135	11	25
1,1,1-Trichloroethane	0.0500	0.06239		mg/L		125	75 - 125	6	25
1,1,2-Trichloroethane	0.0500	0.05313		mg/L		106	75 - 127	1	25
Trichloroethene	0.0500	0.05543		mg/L		111	62 - 137	4	25
Trichlorofluoromethane	0.0500	0.05856		mg/L		117	60 - 140	12	25
1,2,3-Trichloropropane	0.0500	0.05438		mg/L		109	75 - 125	8	25
1,2,4-Trimethylbenzene	0.0500	0.05927		mg/L		119	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.06110		mg/L		122	60 - 140	8	25
Vinyl chloride	0.0500	0.04774		mg/L		95	60 - 140	12	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		74 - 124
Dibromofluoromethane (Surr)	109		75 - 131
1,2-Dichloroethane-d4 (Surr)	99		63 - 144
Toluene-d8 (Surr)	97		80 - 117

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-35032/1-A

Matrix: Water

Analysis Batch: 34957

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35032

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		12/20/21 15:15	12/20/21 17:32	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		12/20/21 15:15	12/20/21 17:32	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		12/20/21 15:15	12/20/21 17:32	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 135			12/20/21 15:15	12/20/21 17:32	1
o-Terphenyl	98		70 - 135			12/20/21 15:15	12/20/21 17:32	1

Lab Sample ID: LCS 860-35032/2-A

Matrix: Water

Analysis Batch: 34957

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	99.4	83.10		mg/L		84	70 - 135
Diesel Range Organics (Over C10-C28)	99.4	82.61		mg/L		83	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	108		70 - 135				
o-Terphenyl	90		70 - 135				

Lab Sample ID: LCSD 860-35032/3-A

Matrix: Water

Analysis Batch: 34957

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35032

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.4	85.31		mg/L		86	70 - 135	3	35
Diesel Range Organics (Over C10-C28)	99.4	81.72		mg/L		82	70 - 135	1	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	103		70 - 135						
o-Terphenyl	87		70 - 135						

Lab Sample ID: 880-9445-1 MS

Matrix: Water

Analysis Batch: 34957

Client Sample ID: MW-1

Prep Type: Total/NA

Prep Batch: 35032

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<0.962	U	93.2	83.79		mg/L		90	70 - 135
Diesel Range Organics (Over C10-C28)	<0.962	U	93.2	78.72		mg/L		84	70 - 135

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: 880-9445-1 MS

Matrix: Water

Analysis Batch: 34957

Client Sample ID: MW-1

Prep Type: Total/NA

Prep Batch: 35032

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 135
o-Terphenyl	87		70 - 135

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-34707/3

Matrix: Water

Analysis Batch: 34707

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB							
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<0.200	U	0.500	0.200 mg/L			12/17/21 06:01	1	
Fluoride	<0.100	U	0.500	0.100 mg/L			12/17/21 06:01	1	
Sulfate	<0.109	U	0.500	0.109 mg/L			12/17/21 06:01	1	

Lab Sample ID: MB 860-34707/39

Matrix: Water

Analysis Batch: 34707

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB							
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<0.200	U	0.500	0.200 mg/L			12/17/21 16:04	1	
Fluoride	<0.100	U	0.500	0.100 mg/L			12/17/21 16:04	1	
Sulfate	<0.109	U	0.500	0.109 mg/L			12/17/21 16:04	1	

Lab Sample ID: LCS 860-34707/4

Matrix: Water

Analysis Batch: 34707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS					%Rec.	
	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	10.0	10.11		mg/L		101	90 - 110		
Fluoride	10.0	10.22		mg/L		102	90 - 110		
Sulfate	10.0	10.26		mg/L		103	90 - 110		

Lab Sample ID: LCS 860-34707/40

Matrix: Water

Analysis Batch: 34707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS					%Rec.	
	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	10.0	10.19		mg/L		102	90 - 110		
Fluoride	10.0	10.20		mg/L		102	90 - 110		
Sulfate	10.0	9.859		mg/L		99	90 - 110		

Lab Sample ID: LCSD 860-34707/41

Matrix: Water

Analysis Batch: 34707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD					%Rec.		RPD
	Added	Result	Qualifier	Unit	D	%Rec	Limits		RPD	Limit
Chloride	10.0	9.985		mg/L		100	90 - 110		2	20
Fluoride	10.0	10.25		mg/L		103	90 - 110		1	20
Sulfate	10.0	9.914		mg/L		99	90 - 110		1	20

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-34707/5

Matrix: Water

Analysis Batch: 34707

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
Chloride			10.0	9.869		mg/L		99	90 - 110	2	20
Fluoride			10.0	10.20		mg/L		102	90 - 110	0	20
Sulfate			10.0	10.24		mg/L		102	90 - 110	0	20

Lab Sample ID: MB 860-34708/3

Matrix: Water

Analysis Batch: 34708

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			12/17/21 06:01	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/17/21 06:01	1

Lab Sample ID: MB 860-34708/39

Matrix: Water

Analysis Batch: 34708

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			12/17/21 16:04	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/17/21 16:04	1

Lab Sample ID: LCS 860-34708/4

Matrix: Water

Analysis Batch: 34708

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	9.922		mg/L		99	80 - 120	
Nitrite as N	5.00	5.095		mg/L		102	80 - 120	

Lab Sample ID: LCS 860-34708/40

Matrix: Water

Analysis Batch: 34708

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Nitrate as N	10.0	10.07		mg/L		101	80 - 120	
Nitrite as N	5.00	5.127		mg/L		103	80 - 120	

Lab Sample ID: LCSD 860-34708/41

Matrix: Water

Analysis Batch: 34708

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	10.07		mg/L		101	80 - 120	0	20
Nitrite as N			5.00	5.149		mg/L		103	80 - 120	0	20

Lab Sample ID: LCSD 860-34708/5

Matrix: Water

Analysis Batch: 34708

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	9.904		mg/L		99	80 - 120	0	20

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-34708/5

Matrix: Water

Analysis Batch: 34708

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
Nitrite as N	5.00	5.085		mg/L		102	80 - 120	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-34949/4

Matrix: Water

Analysis Batch: 34949

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			12/17/21 12:11	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			12/17/21 12:11	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	mg/L			12/17/21 12:11	1

Lab Sample ID: LCS 860-34949/5

Matrix: Water

Analysis Batch: 34949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	250	233.5		mg/L		93	85 - 115

Lab Sample ID: LCSD 860-34949/6

Matrix: Water

Analysis Batch: 34949

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	250	239.6		mg/L		96	85 - 115	3	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-35551/1

Matrix: Water

Analysis Batch: 35551

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			12/17/21 16:56	1

Lab Sample ID: LCS 860-35551/2

Matrix: Water

Analysis Batch: 35551

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	51.4	49.00		mg/L		95	80 - 120

Lab Sample ID: LCSD 860-35551/3

Matrix: Water

Analysis Batch: 35551

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	51.4	49.20		mg/L		96	80 - 120	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 34902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-2	MW-2	Total/NA	Water	8260C	
MB 860-34902/9	Method Blank	Total/NA	Water	8260C	
LCS 860-34902/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34902/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 34903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	8260C	
880-9445-2	MW-2	Total/NA	Water	8260C	
MB 860-34903/9	Method Blank	Total/NA	Water	8260C	
LCS 860-34903/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-34903/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 32219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	8015 NM	
880-9445-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 34957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	8015B NM	35032
880-9445-2	MW-2	Total/NA	Water	8015B NM	35032
MB 860-35032/1-A	Method Blank	Total/NA	Water	8015B NM	35032
LCS 860-35032/2-A	Lab Control Sample	Total/NA	Water	8015B NM	35032
LCSD 860-35032/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	35032
880-9445-1 MS	MW-1	Total/NA	Water	8015B NM	35032

Prep Batch: 35032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-9445-2	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-35032/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-35032/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-35032/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	
880-9445-1 MS	MW-1	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 34707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	300.0	
880-9445-2	MW-2	Total/NA	Water	300.0	
MB 860-34707/3	Method Blank	Total/NA	Water	300.0	
MB 860-34707/39	Method Blank	Total/NA	Water	300.0	
LCS 860-34707/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-34707/40	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-34707/41	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-34707/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

HPLC/IC

Analysis Batch: 34708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	300.0	
880-9445-2	MW-2	Total/NA	Water	300.0	
MB 860-34708/3	Method Blank	Total/NA	Water	300.0	
MB 860-34708/39	Method Blank	Total/NA	Water	300.0	
LCS 860-34708/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 860-34708/40	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-34708/41	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 860-34708/5	Lab Control Sample Dup	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 34949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	SM 2320B	
880-9445-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-34949/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-34949/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-34949/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 35024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-9445-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 35258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-9445-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Analysis Batch: 35551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9445-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-9445-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-35551/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-35551/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-35551/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	

Eurofins Xenco, Midland

Lab Chronicle

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

Job ID: 880-9445-1

Client Sample ID: MW-1
Date Collected: 12/09/21 10:00
Date Received: 12/16/21 15:22

Lab Sample ID: 880-9445-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	34903	12/20/21 12:24	NA	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/21/21 09:26	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep			35032	12/20/21 15:15	IS	XEN STF
Total/NA	Analysis	8015B NM		1	34957	12/20/21 18:34	T1S	XEN STF
Total/NA	Analysis	300.0		1	34707	12/17/21 16:34	WP	XEN STF
Total/NA	Analysis	300.0		1	34708	12/17/21 16:34	WP	XEN STF
Total/NA	Analysis	SM 2320B		1	34949	12/17/21 18:55	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	35258	12/22/21 09:05	ANP	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	35024	12/20/21 16:11	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	35551	12/17/21 16:56	YVD	XEN STF

Client Sample ID: MW-2
Date Collected: 12/09/21 11:20
Date Received: 12/16/21 15:22

Lab Sample ID: 880-9445-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	34902	12/20/21 16:19	NA	XEN STF
Total/NA	Analysis	8260C		1	34903	12/20/21 12:43	NA	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/21/21 09:26	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep			35032	12/20/21 15:15	IS	XEN STF
Total/NA	Analysis	8015B NM		1	34957	12/20/21 19:09	T1S	XEN STF
Total/NA	Analysis	300.0		1	34707	12/17/21 16:43	WP	XEN STF
Total/NA	Analysis	300.0		1	34708	12/17/21 16:43	WP	XEN STF
Total/NA	Analysis	SM 2320B		1	34949	12/17/21 19:12	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	35258	12/22/21 09:05	ANP	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	35024	12/20/21 16:11	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	35551	12/17/21 16:56	YVD	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum

Job ID: 880-9445-1

Project/Site: South Hobbs - 03B1417002

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

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)
8260C		Water	Total BTEX
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

Eurofins Xenco, Midland

Method Summary

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

Job ID: 880-9445-1

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

Protocol References:

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

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

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-9445-1

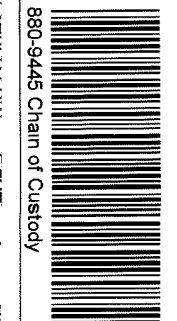
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9445-1	MW-1	Water	12/09/21 10:00	12/16/21 15:22
880-9445-2	MW-2	Water	12/09/21 11:20	12/16/21 15:22

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



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296



880-9445 Chain of Custody

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

Program: UST/PST ☐ PRP ☐ Brownfields ☒ RRC ☐ Superfund ☐	
State of Project: <u>New Mexico</u>	
Reporting Level II ☐	Level III ☐
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:	Aaron Marquez	Due Date			
SAMPLE RECEIPT					
Temperature (°C):	15.110	Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒
Received Inlet:	Yes ☒ No ☐	Thermometer ID	T-108		
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor:	.10		
Sample Custody Seals:	Yes ☐ No ☒	Total Containers:			
Sample Identification					
Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	
MW-1	GW	12-16-21	1000	75'	7
MW-2	GW	12-16-21	1120	85'	7
<i>Handwritten: All 6 AAAA 12-16-21</i>					
Dissolved Carbon Dioxide 4500 CO2 c					
Dissolved Sulfide SW-846 #376.2					
VOC SW-846 #8260					
TPH EPA Method #8015					
Chloride EPA Method #846 300					
pH EPA SW-846 Method 150.1					
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	
<i>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 \$3 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.</i>							
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		
<i>[Signature]</i>	<i>[Signature]</i>	12/16/21 15:04					
3		4					
5		6					

CUSTODY SEAL



ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 12-16-2021

Signature: [Handwritten Signature]

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9445-1

Login Number: 9445

List Source: Eurofins Xenco, Midland

List Number: 1

Creator: Teel, Brianna

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9445-1

Login Number: 9445

List Source: Eurofins Xenco, Stafford

List Number: 2

List Creation: 12/17/21 10:36 AM

Creator: Palmar, Pedro

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9648-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

Authorized for release by:
12/29/2021 12:12:23 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through
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www.eurofinsus.com/Env

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

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

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

Laboratory Job ID: 880-9648-1

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Definitions/Glossary

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

Job ID: 880-9648-1

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
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: 880-9648-1

Job ID: 880-9648-1

Laboratory: Eurofins Xenco, Midland

Narrative	Job Narrative 880-9648-1

Receipt

The samples were received on 12/22/2021 2:26 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 10.1°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 matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 860-35445 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 860-35446 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

General Chemistry

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

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Client Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9648-1

Date Collected: 12/22/21 09:45

Matrix: Water

Date Received: 12/22/21 14:26

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/27/21 11:37	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/27/21 11:37	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/27/21 11:37	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/27/21 11:37	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/27/21 11:37	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/27/21 11:37	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/27/21 11:37	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/27/21 11:37	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/27/21 11:37	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/27/21 11:37	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/27/21 11:37	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/27/21 11:37	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/27/21 11:37	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/27/21 11:37	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/27/21 11:37	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/27/21 11:37	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/27/21 11:37	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/27/21 11:37	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/27/21 11:37	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/27/21 11:37	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/27/21 11:37	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/27/21 11:37	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/27/21 11:37	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/27/21 11:37	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/27/21 11:37	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/27/21 11:37	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/27/21 11:37	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/27/21 11:37	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/27/21 11:37	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/27/21 11:37	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/27/21 11:37	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 11:37	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/27/21 11:37	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/27/21 11:37	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/27/21 11:37	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/27/21 11:37	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/27/21 11:37	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/27/21 11:37	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/27/21 11:37	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/27/21 11:37	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/27/21 11:37	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/27/21 11:37	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/27/21 11:37	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/27/21 11:37	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/27/21 11:37	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/27/21 11:37	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/27/21 11:37	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/27/21 11:37	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/27/21 11:37	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9648-1

Date Collected: 12/22/21 09:45

Matrix: Water

Date Received: 12/22/21 14:26

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/27/21 11:37	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 11:37	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 11:37	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/27/21 11:37	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/27/21 11:37	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/27/21 11:37	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/27/21 11:37	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/27/21 11:37	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/27/21 11:37	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/27/21 11:37	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/27/21 11:37	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/27/21 11:37	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/27/21 11:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		12/27/21 11:37	1
Dibromofluoromethane (Surr)	101		75 - 131		12/27/21 11:37	1
1,2-Dichloroethane-d4 (Surr)	94		63 - 144		12/27/21 11:37	1
Toluene-d8 (Surr)	101		80 - 117		12/27/21 11:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.34	J	4.76	0.941 mg/L			12/21/21 09:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.34	J	4.76	0.941 mg/L		12/27/21 14:29	12/27/21 18:40	1
Diesel Range Organics (Over C10-C28)	<0.941	U	4.76	0.941 mg/L		12/27/21 14:29	12/27/21 18:40	1
Oil Range Organics (Over C28-C36)	<0.908	U	4.76	0.908 mg/L		12/27/21 14:29	12/27/21 18:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 135			12/27/21 14:29	12/27/21 18:40	1
o-Terphenyl	114		70 - 135			12/27/21 14:29	12/27/21 18:40	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	163		0.500	0.200 mg/L			12/23/21 14:22	1
Nitrate as N	0.240		0.100	0.0391 mg/L			12/23/21 14:22	1
Fluoride	0.517		0.500	0.100 mg/L			12/23/21 14:22	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/23/21 14:22	1
Sulfate	40.2		0.500	0.109 mg/L			12/23/21 14:22	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	312		4.00	4.00 mg/L			12/23/21 17:53	1
Bicarbonate Alkalinity as CaCO3	312		4.00	4.00 mg/L			12/23/21 17:53	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/23/21 17:53	1
Carbon dioxide	324			mg/L			12/29/21 08:47	1
Carbon Dioxide, Free	49.5			mg/L			12/29/21 08:47	1

Eurofins Xenco, Midland

Client Sample Results

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

Job ID: 880-9648-1

Client Sample ID: MW-1

Lab Sample ID: 880-9648-1

Date Collected: 12/22/21 09:45

Matrix: Water

Date Received: 12/22/21 14:26

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.1	HF		SU			12/27/21 17:03	1
Temperature	21.5	HF		Celsius			12/27/21 17:03	1
Sulfide	<0.495	U	5.00	0.495 mg/L			12/23/21 17:08	1

Client Sample ID: MW-2

Lab Sample ID: 880-9648-2

Date Collected: 12/22/21 10:55

Matrix: Water

Date Received: 12/22/21 14:26

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0351		0.00100	0.000214 mg/L			12/27/21 11:57	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/27/21 11:57	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/27/21 11:57	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/27/21 11:57	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/27/21 11:57	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/27/21 11:57	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/27/21 11:57	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/27/21 11:57	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/27/21 11:57	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/27/21 11:57	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/27/21 11:57	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/27/21 11:57	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/27/21 11:57	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/27/21 11:57	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/27/21 11:57	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/27/21 11:57	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/27/21 11:57	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/27/21 11:57	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/27/21 11:57	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/27/21 11:57	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/27/21 11:57	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/27/21 11:57	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/27/21 11:57	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/27/21 11:57	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/27/21 11:57	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/27/21 11:57	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/27/21 11:57	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/27/21 11:57	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/27/21 11:57	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/27/21 11:57	1
Ethylbenzene	0.0376		0.00100	0.000515 mg/L			12/27/21 11:57	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 11:57	1
Isopropylbenzene	0.0129		0.00100	0.000161 mg/L			12/27/21 11:57	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/27/21 11:57	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/27/21 11:57	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/27/21 11:57	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/27/21 11:57	1
N-Propylbenzene	0.00448		0.00100	0.000179 mg/L			12/27/21 11:57	1
o-Xylene	0.0216		0.00100	0.000192 mg/L			12/27/21 11:57	1
p-Cymene (p-Isopropyltoluene)	0.00135		0.00100	0.000233 mg/L			12/27/21 11:57	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-9648-2

Date Collected: 12/22/21 10:55

Matrix: Water

Date Received: 12/22/21 14:26

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.00168		0.00100	0.000199 mg/L			12/27/21 11:57	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/27/21 11:57	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/27/21 11:57	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/27/21 11:57	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/27/21 11:57	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/27/21 11:57	1
Toluene	0.0155		0.00100	0.000500 mg/L			12/27/21 11:57	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/27/21 11:57	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/27/21 11:57	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 11:57	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 11:57	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/27/21 11:57	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/27/21 11:57	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/27/21 11:57	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/27/21 11:57	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/27/21 11:57	1
1,2,4-Trimethylbenzene	0.0528		0.00100	0.000252 mg/L			12/27/21 11:57	1
1,3,5-Trimethylbenzene	0.0139		0.00100	0.000279 mg/L			12/27/21 11:57	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/27/21 11:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		74 - 124		12/27/21 11:57	1
Dibromofluoromethane (Surr)	100		75 - 131		12/27/21 11:57	1
1,2-Dichloroethane-d4 (Surr)	92		63 - 144		12/27/21 11:57	1
Toluene-d8 (Surr)	101		80 - 117		12/27/21 11:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylenes	0.282		0.0500	0.00165 mg/L			12/27/21 12:18	5
Xylenes, Total	0.315		0.0500	0.00165 mg/L			12/27/21 12:18	5
Total BTEX	0.449		0.0500	0.00500 mg/L			12/27/21 12:18	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		74 - 124		12/27/21 12:18	5
Dibromofluoromethane (Surr)	100		75 - 131		12/27/21 12:18	5
1,2-Dichloroethane-d4 (Surr)	93		63 - 144		12/27/21 12:18	5
Toluene-d8 (Surr)	100		80 - 117		12/27/21 12:18	5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.95	J	4.78	0.944 mg/L			12/21/21 09:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.95	J	4.78	0.944 mg/L		12/27/21 14:29	12/28/21 13:07	1
Diesel Range Organics (Over C10-C28)	<0.944	U	4.78	0.944 mg/L		12/27/21 14:29	12/28/21 13:07	1
Oil Range Organics (Over C28-C36)	<0.911	U	4.78	0.911 mg/L		12/27/21 14:29	12/28/21 13:07	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-9648-2

Date Collected: 12/22/21 10:55

Matrix: Water

Date Received: 12/22/21 14:26

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 135			12/27/21 14:29	12/28/21 13:07	1
o-Terphenyl	123		70 - 135			12/27/21 14:29	12/28/21 13:07	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	163		0.500	0.200	mg/L			12/23/21 14:40	1
Nitrate as N	0.670		0.100	0.0391	mg/L			12/23/21 14:40	1
Fluoride	<0.100	U	0.500	0.100	mg/L			12/23/21 14:40	1
Nitrite as N	0.462		0.100	0.0293	mg/L			12/23/21 14:40	1
Sulfate	122		0.500	0.109	mg/L			12/23/21 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1280		4.00	4.00	mg/L			12/23/21 17:44	1
Bicarbonate Alkalinity as CaCO3	1280		4.00	4.00	mg/L			12/23/21 17:44	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			12/23/21 17:44	1
Carbon dioxide	2140				mg/L			12/29/21 08:47	1
Carbon Dioxide, Free	1020				mg/L			12/29/21 08:47	1
pH	6.4	HF			SU			12/27/21 17:03	1
Temperature	21.6	HF			Celsius			12/27/21 17:03	1
Sulfide	<0.495	U	5.00	0.495	mg/L			12/23/21 17:08	1

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Surrogate Summary

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

Job ID: 880-9648-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
860-17881-F-1 MS	Matrix Spike	99	98	88	98
880-9648-1	MW-1	101	101	94	101
880-9648-2	MW-2	99	100	92	101
880-9648-2 - DL	MW-2	100	100	93	100
LCS 860-35577/3	Lab Control Sample	101	99	88	99
LCSD 860-35577/4	Lab Control Sample Dup	100	99	88	98
MB 860-35577/9	Method Blank	101	101	93	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)
880-9648-1	MW-1	100	114
880-9648-1 MS	MW-1	111	104
880-9648-2 - RA	MW-2	118	123
LCS 860-35672/2-A	Lab Control Sample	119	113
LCSD 860-35672/3-A	Lab Control Sample Dup	121	117
MB 860-35672/1-A - RA	Method Blank	98	102

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-35577/9

Matrix: Water

Analysis Batch: 35577

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			12/27/21 10:56	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			12/27/21 10:56	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			12/27/21 10:56	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			12/27/21 10:56	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			12/27/21 10:56	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			12/27/21 10:56	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			12/27/21 10:56	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			12/27/21 10:56	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			12/27/21 10:56	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			12/27/21 10:56	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			12/27/21 10:56	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			12/27/21 10:56	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			12/27/21 10:56	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			12/27/21 10:56	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			12/27/21 10:56	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			12/27/21 10:56	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			12/27/21 10:56	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			12/27/21 10:56	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			12/27/21 10:56	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			12/27/21 10:56	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			12/27/21 10:56	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			12/27/21 10:56	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			12/27/21 10:56	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			12/27/21 10:56	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			12/27/21 10:56	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			12/27/21 10:56	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			12/27/21 10:56	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			12/27/21 10:56	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			12/27/21 10:56	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			12/27/21 10:56	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			12/27/21 10:56	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 10:56	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			12/27/21 10:56	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			12/27/21 10:56	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			12/27/21 10:56	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			12/27/21 10:56	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			12/27/21 10:56	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			12/27/21 10:56	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			12/27/21 10:56	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			12/27/21 10:56	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			12/27/21 10:56	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			12/27/21 10:56	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			12/27/21 10:56	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			12/27/21 10:56	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			12/27/21 10:56	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			12/27/21 10:56	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			12/27/21 10:56	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			12/27/21 10:56	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-35577/9

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 35577

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			12/27/21 10:56	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			12/27/21 10:56	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 10:56	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			12/27/21 10:56	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			12/27/21 10:56	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			12/27/21 10:56	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			12/27/21 10:56	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			12/27/21 10:56	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			12/27/21 10:56	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			12/27/21 10:56	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			12/27/21 10:56	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			12/27/21 10:56	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			12/27/21 10:56	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			12/27/21 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		74 - 124		12/27/21 10:56	1
Dibromofluoromethane (Surr)	101		75 - 131		12/27/21 10:56	1
1,2-Dichloroethane-d4 (Surr)	93		63 - 144		12/27/21 10:56	1
Toluene-d8 (Surr)	100		80 - 117		12/27/21 10:56	1

Lab Sample ID: LCS 860-35577/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 35577

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05451		mg/L		109	66 - 142
Bromobenzene	0.0500	0.05148		mg/L		103	75 - 125
Bromochloromethane	0.0500	0.05328		mg/L		107	60 - 140
Bromodichloromethane	0.0500	0.05063		mg/L		101	75 - 125
Bromoform	0.0500	0.05016		mg/L		100	75 - 125
Bromomethane	0.0500	0.05082		mg/L		102	60 - 140
2-Butanone	0.250	0.2383		mg/L		95	60 - 140
Carbon tetrachloride	0.0500	0.05417		mg/L		108	62 - 125
Chlorobenzene	0.0500	0.05231		mg/L		105	60 - 133
Chloroethane	0.0500	0.04841		mg/L		97	60 - 140
Chloroform	0.0500	0.05264		mg/L		105	70 - 130
Chloromethane	0.0500	0.05005		mg/L		100	60 - 140
2-Chlorotoluene	0.0500	0.05277		mg/L		106	73 - 125
4-Chlorotoluene	0.0500	0.05337		mg/L		107	74 - 125
cis-1,2-Dichloroethene	0.0500	0.05337		mg/L		107	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05349		mg/L		107	74 - 125
Dibromochloromethane	0.0500	0.05052		mg/L		101	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04720		mg/L		94	59 - 125
1,2-Dibromoethane	0.0500	0.04809		mg/L		96	73 - 125
1,2-Dichlorobenzene	0.0500	0.05219		mg/L		104	75 - 125
1,3-Dichlorobenzene	0.0500	0.05342		mg/L		107	75 - 125
1,4-Dichlorobenzene	0.0500	0.05166		mg/L		103	75 - 125

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QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-35577/3

Matrix: Water

Analysis Batch: 35577

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.05333		mg/L		107	70 - 130
1,1-Dichloroethane	0.0500	0.05539		mg/L		111	72 - 125
1,2-Dichloroethane	0.0500	0.04584		mg/L		92	68 - 127
1,1-Dichloroethene	0.0500	0.05271		mg/L		105	59 - 172
1,2-Dichloropropane	0.0500	0.05348		mg/L		107	74 - 125
1,3-Dichloropropane	0.0500	0.04806		mg/L		96	75 - 125
2,2-Dichloropropane	0.0500	0.05789		mg/L		116	75 - 125
1,1-Dichloropropene	0.0500	0.05544		mg/L		111	75 - 125
Ethylbenzene	0.0500	0.05346		mg/L		107	75 - 125
Hexachlorobutadiene	0.0500	0.05426		mg/L		109	75 - 125
Isopropylbenzene	0.0500	0.04901		mg/L		98	75 - 125
Methylene Chloride	0.0500	0.05193		mg/L		104	75 - 125
m,p-Xylenes	0.0500	0.05348		mg/L		107	75 - 125
MTBE	0.0500	0.05044		mg/L		101	65 - 135
Naphthalene	0.0500	0.04828		mg/L		97	70 - 130
n-Butylbenzene	0.0500	0.05468		mg/L		109	75 - 125
N-Propylbenzene	0.0500	0.05540		mg/L		111	75 - 125
o-Xylene	0.0500	0.05266		mg/L		105	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.05685		mg/L		114	75 - 125
sec-Butylbenzene	0.0500	0.05599		mg/L		112	75 - 125
Styrene	0.0500	0.05436		mg/L		109	75 - 125
tert-Butylbenzene	0.0500	0.05501		mg/L		110	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.05212		mg/L		104	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04791		mg/L		96	74 - 125
Tetrachloroethene	0.0500	0.05354		mg/L		107	71 - 125
Toluene	0.0500	0.05268		mg/L		105	59 - 139
trans-1,2-Dichloroethene	0.0500	0.05610		mg/L		112	75 - 125
trans-1,3-Dichloropropene	0.0500	0.05039		mg/L		101	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.05002		mg/L		100	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05079		mg/L		102	75 - 135
1,1,1-Trichloroethane	0.0500	0.05297		mg/L		106	75 - 125
1,1,2-Trichloroethane	0.0500	0.04913		mg/L		98	75 - 127
Trichloroethene	0.0500	0.05508		mg/L		110	62 - 137
Trichlorofluoromethane	0.0500	0.05404		mg/L		108	60 - 140
1,2,3-Trichloropropane	0.0500	0.04887		mg/L		98	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.05579		mg/L		112	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.05497		mg/L		110	60 - 140
Vinyl chloride	0.0500	0.05275		mg/L		106	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	88		63 - 144
Toluene-d8 (Surr)	99		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-35577/4

Matrix: Water

Analysis Batch: 35577

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	0.05040		mg/L		101	66 - 142	8	25
Bromobenzene	0.0500	0.05002		mg/L		100	75 - 125	3	25
Bromochloromethane	0.0500	0.05046		mg/L		101	60 - 140	5	25
Bromodichloromethane	0.0500	0.04789		mg/L		96	75 - 125	6	25
Bromoform	0.0500	0.05125		mg/L		103	75 - 125	2	25
Bromomethane	0.0500	0.04694		mg/L		94	60 - 140	8	25
2-Butanone	0.250	0.2614		mg/L		105	60 - 140	9	25
Carbon tetrachloride	0.0500	0.04858		mg/L		97	62 - 125	11	25
Chlorobenzene	0.0500	0.04925		mg/L		99	60 - 133	6	25
Chloroethane	0.0500	0.05011		mg/L		100	60 - 140	3	25
Chloroform	0.0500	0.04827		mg/L		97	70 - 130	9	25
Chloromethane	0.0500	0.05002		mg/L		100	60 - 140	0	25
2-Chlorotoluene	0.0500	0.04991		mg/L		100	73 - 125	6	25
4-Chlorotoluene	0.0500	0.05013		mg/L		100	74 - 125	6	25
cis-1,2-Dichloroethene	0.0500	0.04893		mg/L		98	75 - 125	9	25
cis-1,3-Dichloropropene	0.0500	0.05105		mg/L		102	74 - 125	5	25
Dibromochloromethane	0.0500	0.05005		mg/L		100	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.05570		mg/L		111	59 - 125	17	25
1,2-Dibromoethane	0.0500	0.04888		mg/L		98	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.05016		mg/L		100	75 - 125	4	25
1,3-Dichlorobenzene	0.0500	0.05095		mg/L		102	75 - 125	5	25
1,4-Dichlorobenzene	0.0500	0.04955		mg/L		99	75 - 125	4	25
Dichlorodifluoromethane	0.0500	0.05500		mg/L		110	70 - 130	3	25
1,1-Dichloroethane	0.0500	0.05061		mg/L		101	72 - 125	9	25
1,2-Dichloroethane	0.0500	0.04427		mg/L		89	68 - 127	3	25
1,1-Dichloroethene	0.0500	0.04701		mg/L		94	59 - 172	11	25
1,2-Dichloropropane	0.0500	0.05074		mg/L		101	74 - 125	5	25
1,3-Dichloropropane	0.0500	0.04782		mg/L		96	75 - 125	1	25
2,2-Dichloropropane	0.0500	0.05264		mg/L		105	75 - 125	9	25
1,1-Dichloropropene	0.0500	0.05060		mg/L		101	75 - 125	9	25
Ethylbenzene	0.0500	0.04995		mg/L		100	75 - 125	7	25
Hexachlorobutadiene	0.0500	0.05453		mg/L		109	75 - 125	0	25
Isopropylbenzene	0.0500	0.04600		mg/L		92	75 - 125	6	25
Methylene Chloride	0.0500	0.04797		mg/L		96	75 - 125	8	25
m,p-Xylenes	0.0500	0.04976		mg/L		100	75 - 125	7	25
MTBE	0.0500	0.05056		mg/L		101	65 - 135	0	25
Naphthalene	0.0500	0.05643		mg/L		113	70 - 130	16	25
n-Butylbenzene	0.0500	0.05199		mg/L		104	75 - 125	5	25
N-Propylbenzene	0.0500	0.05143		mg/L		103	75 - 125	7	25
o-Xylene	0.0500	0.05020		mg/L		100	75 - 125	5	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.05332		mg/L		107	75 - 125	6	25
sec-Butylbenzene	0.0500	0.05324		mg/L		106	75 - 125	5	25
Styrene	0.0500	0.05156		mg/L		103	75 - 125	5	25
tert-Butylbenzene	0.0500	0.05111		mg/L		102	75 - 125	7	25
1,1,1,2-Tetrachloroethane	0.0500	0.04932		mg/L		99	72 - 125	6	25
1,1,2,2-Tetrachloroethane	0.0500	0.05047		mg/L		101	74 - 125	5	25
Tetrachloroethene	0.0500	0.04923		mg/L		98	71 - 125	8	25
Toluene	0.0500	0.04919		mg/L		98	59 - 139	7	25

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QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-35577/4

Matrix: Water

Analysis Batch: 35577

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	0.05096		mg/L		102	75 - 125	10	25
trans-1,3-Dichloropropene	0.0500	0.04882		mg/L		98	66 - 125	3	25
1,2,3-Trichlorobenzene	0.0500	0.05560		mg/L		111	75 - 137	11	25
1,2,4-Trichlorobenzene	0.0500	0.05274		mg/L		105	75 - 135	4	25
1,1,1-Trichloroethane	0.0500	0.04864		mg/L		97	75 - 125	9	25
1,1,2-Trichloroethane	0.0500	0.04944		mg/L		99	75 - 127	1	25
Trichloroethene	0.0500	0.05055		mg/L		101	62 - 137	9	25
Trichlorofluoromethane	0.0500	0.05464		mg/L		109	60 - 140	1	25
1,2,3-Trichloropropane	0.0500	0.05141		mg/L		103	75 - 125	5	25
1,2,4-Trimethylbenzene	0.0500	0.05230		mg/L		105	75 - 125	6	25
1,3,5-Trimethylbenzene	0.0500	0.05227		mg/L		105	60 - 140	5	25
Vinyl chloride	0.0500	0.05414		mg/L		108	60 - 140	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	88		63 - 144
Toluene-d8 (Surr)	98		80 - 117

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

Lab Sample ID: LCS 860-35672/2-A

Matrix: Water

Analysis Batch: 35606

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35672

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	99.4	103.0		mg/L		104	70 - 135
Diesel Range Organics (Over C10-C28)	99.4	108.7		mg/L		109	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	119		70 - 135
o-Terphenyl	113		70 - 135

Lab Sample ID: LCSD 860-35672/3-A

Matrix: Water

Analysis Batch: 35606

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35672

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.4	102.2		mg/L		103	70 - 135	1	35
Diesel Range Organics (Over C10-C28)	99.4	114.3		mg/L		115	70 - 135	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	121		70 - 135
o-Terphenyl	117		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: 880-9648-1 MS

Matrix: Water

Analysis Batch: 35606

Client Sample ID: MW-1

Prep Type: Total/NA

Prep Batch: 35672

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1.34	J	93.2	92.68		mg/L		98	70 - 135
Diesel Range Organics (Over C10-C28)	<0.941	U	93.2	105.2		mg/L		113	70 - 135
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	111		70 - 135						
o-Terphenyl	104		70 - 135						

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

Lab Sample ID: MB 860-35672/1-A

Matrix: Water

Analysis Batch: 35807

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35672

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 - RA	<0.988	U	5.00	0.988 mg/L		12/27/21 14:29	12/28/21 12:49	1
Diesel Range Organics (Over C10-C28) - RA	<0.988	U	5.00	0.988 mg/L		12/27/21 14:29	12/28/21 12:49	1
Oil Range Organics (Over C28-C36) - RA	<0.954	U	5.00	0.954 mg/L		12/27/21 14:29	12/28/21 12:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane - RA	98		70 - 135			12/27/21 14:29	12/28/21 12:49	1
o-Terphenyl - RA	102		70 - 135			12/27/21 14:29	12/28/21 12:49	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-35445/3

Matrix: Water

Analysis Batch: 35445

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			12/23/21 10:10	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/23/21 10:10	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/23/21 10:10	1

Lab Sample ID: LCS 860-35445/4

Matrix: Water

Analysis Batch: 35445

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.18		mg/L		102	90 - 110
Fluoride	10.0	10.26		mg/L		103	90 - 110
Sulfate	10.0	9.900		mg/L		99	90 - 110

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QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-35445/5

Matrix: Water

Analysis Batch: 35445

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	10.04		mg/L		100	90 - 110	1	20
Fluoride	10.0	10.29		mg/L		103	90 - 110	0	20
Sulfate	10.0	9.922		mg/L		99	90 - 110	0	20

Lab Sample ID: MB 860-35446/3

Matrix: Water

Analysis Batch: 35446

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			12/23/21 10:10		1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/23/21 10:10		1

Lab Sample ID: LCS 860-35446/4

Matrix: Water

Analysis Batch: 35446

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	9.978		mg/L		100	80 - 120	
Nitrite as N	5.00	5.092		mg/L		102	80 - 120	

Lab Sample ID: LCSD 860-35446/5

Matrix: Water

Analysis Batch: 35446

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	RPD Limits
							Limits			
Nitrate as N	10.0	9.992		mg/L		100	80 - 120		0	20
Nitrite as N	5.00	5.115		mg/L		102	80 - 120		0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-35622/17

Matrix: Water

Analysis Batch: 35622

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed		Dil Fac
	Result	Qualifier							
Alkalinity	<4.00	U	4.00	4.00 mg/L			12/23/21 15:41		1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/23/21 15:41		1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			12/23/21 15:41		1

Lab Sample ID: LCS 860-35622/18

Matrix: Water

Analysis Batch: 35622

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Alkalinity	250	243.8		mg/L		98	85 - 115	

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QC Sample Results

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 860-35622/19

Matrix: Water

Analysis Batch: 35622

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	248.9		mg/L		100	85 - 115	2	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-35553/1

Matrix: Water

Analysis Batch: 35553

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			12/23/21 17:08	1

Lab Sample ID: LCS 860-35553/2

Matrix: Water

Analysis Batch: 35553

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Sulfide	51.4	49.20		mg/L		96	80 - 120	

Lab Sample ID: LCSD 860-35553/3

Matrix: Water

Analysis Batch: 35553

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	51.4	49.20		mg/L		96	80 - 120	0	20

Lab Sample ID: 880-9648-1 MS

Matrix: Water

Analysis Batch: 35553

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	51.4	49.80		mg/L		97	80 - 120	

Lab Sample ID: 880-9648-1 MSD

Matrix: Water

Analysis Batch: 35553

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	51.4	49.60		mg/L		97	80 - 120	0	20

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QC Association Summary

Client: Ensolum

Job ID: 880-9648-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 35577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	8260C	
880-9648-2	MW-2	Total/NA	Water	8260C	
880-9648-2 - DL	MW-2	Total/NA	Water	8260C	
MB 860-35577/9	Method Blank	Total/NA	Water	8260C	
LCS 860-35577/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-35577/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 32219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	8015 NM	
880-9648-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 35606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	8015B NM	35672
LCS 860-35672/2-A	Lab Control Sample	Total/NA	Water	8015B NM	35672
LCSD 860-35672/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	35672
880-9648-1 MS	MW-1	Total/NA	Water	8015B NM	35672

Prep Batch: 35672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-9648-2 - RA	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-35672/1-A - RA	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-35672/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-35672/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	
880-9648-1 MS	MW-1	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 35807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-2 - RA	MW-2	Total/NA	Water	8015B NM	35672
MB 860-35672/1-A - RA	Method Blank	Total/NA	Water	8015B NM	35672

HPLC/IC

Analysis Batch: 35445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	300.0	
880-9648-2	MW-2	Total/NA	Water	300.0	
MB 860-35445/3	Method Blank	Total/NA	Water	300.0	
LCS 860-35445/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-35445/5	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 35446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	300.0	
880-9648-2	MW-2	Total/NA	Water	300.0	
MB 860-35446/3	Method Blank	Total/NA	Water	300.0	
LCS 860-35446/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-35446/5	Lab Control Sample Dup	Total/NA	Water	300.0	

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QC Association Summary

Client: Ensolum

Project/Site: South Hobbs - 03B1417002

Job ID: 880-9648-1

General Chemistry

Analysis Batch: 35553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-9648-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-35553/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-35553/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-35553/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
880-9648-1 MS	MW-1	Total/NA	Water	SM 4500 S2 F	
880-9648-1 MSD	MW-1	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 35622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	SM 2320B	
880-9648-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-35622/17	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-35622/18	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-35622/19	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 35705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-9648-2	MW-2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 35884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9648-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-9648-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Lab Chronicle

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

Job ID: 880-9648-1

Client Sample ID: MW-1
Date Collected: 12/22/21 09:45
Date Received: 12/22/21 14:26

Lab Sample ID: 880-9648-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	35577	12/27/21 11:37	NA	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/21/21 09:26	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep			35672	12/27/21 14:29	IS	XEN STF
Total/NA	Analysis	8015B NM		1	35606	12/27/21 18:40	T1S	XEN STF
Total/NA	Analysis	300.0		1	35445	12/23/21 14:22	ANP	XEN STF
Total/NA	Analysis	300.0		1	35446	12/23/21 14:22	ANP	XEN STF
Total/NA	Analysis	SM 2320B		1	35622	12/23/21 17:53	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	35884	12/29/21 08:47	AA	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	35705	12/27/21 17:03	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	35553	12/23/21 17:08	YVD	XEN STF

Client Sample ID: MW-2
Date Collected: 12/22/21 10:55
Date Received: 12/22/21 14:26

Lab Sample ID: 880-9648-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	35577	12/27/21 11:57	NA	XEN STF
Total/NA	Analysis	8260C	DL	5	35577	12/27/21 12:18	NA	XEN STF
Total/NA	Analysis	8015 NM		1	32219	12/21/21 09:26	IS	XEN STF
Total/NA	Prep	8015NM Aq Prep	RA		35672	12/27/21 14:29	IS	XEN STF
Total/NA	Analysis	8015B NM	RA	1	35807	12/28/21 13:07	T1S	XEN STF
Total/NA	Analysis	300.0		1	35445	12/23/21 14:40	ANP	XEN STF
Total/NA	Analysis	300.0		1	35446	12/23/21 14:40	ANP	XEN STF
Total/NA	Analysis	SM 2320B		1	35622	12/23/21 17:44	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	35884	12/29/21 08:47	AA	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	35705	12/27/21 17:03	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	35553	12/23/21 17:08	YVD	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 880-9648-1

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

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)
8260C		Water	Total BTEX
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: 880-9648-1

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

Protocol References:

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

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

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

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-9648-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9648-1	MW-1	Water	12/22/21 09:45	12/22/21 14:26
880-9648-2	MW-2	Water	12/22/21 10:55	12/22/21 14:26

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Houston, TX (281) 240-4200 Dallas, TX (214) 902-0380 San Antonio, TX (210) 508-3334
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575-392-7550) Phoenix, AZ (480-355-0800) Atlanta, GA (770-449-8800) Tampa, FL (813)

Chain of Custody

Wor



880-9648 Chain of Custody

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

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☒ Superfund ☐	
State of Project: <i>New Mexico</i>	
Reporting Level II ☐ Level III ☐ PST/UST ☐ RRP ☐ 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:	Aaron Marquez	Due Date		
SAMPLE RECEIPT				
Temperature (°C):	10.9/10.1	Temp Blank: Yes ☐ No ☒	Wet Ice: ☒ No ☐	Thermometer ID
Received In tact:	Yes ☒ No ☐	IRP		
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor: 10		
Sample Custody Seals:	Yes ☐ No ☒	Total Containers: 10		
Number of Containers				
Reduced Carbon Dioxide 4500 CO2 c				
Reduced Sulfide SW-846 #376.2				
SW-846 #8260				
SW-846 Method #8015				
SW-846 Method #846 300				
SW-846 Method 150.1				
TAT starts the day received by the lab, if received by 4:30pm				

[illegible]

www.essvial.com 800-233-8425

Signature:

Date:

CUSTODY SEAL

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

Xenoco 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 Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/22/21 14:19	2		
			4		
			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9648-1

Login Number: 9648

List Source: Eurofins Xenco, Midland

List Number: 1

Creator: Teel, Brianna

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9648-1

Login Number: 9648

List Source: Eurofins Xenco, Stafford

List Number: 2

List Creation: 12/23/21 12:31 PM

Creator: Milone, Jeancarlo

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9759-1

Client Project/Site: South Hobbs - 03B1417002

Sampling Event: South Hobbs

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

Authorized for release by:
1/7/2022 7:07:02 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

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

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

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

Laboratory Job ID: 880-9759-1

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Definitions/Glossary

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

Job ID: 880-9759-1

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
E	Result exceeded calibration range.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

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

Job ID: 880-9759-1

Job ID: 880-9759-1

Laboratory: Eurofins Xenco

Narrative	
	Job Narrative 880-9759-1

Receipt

The samples were received on 12/29/2021 3:35 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 10.2°C

GC/MS VOA

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

GC Semi VOA

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

HPLC/IC

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

General Chemistry

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

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Client Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9759-1

Date Collected: 12/29/21 10:00

Matrix: Water

Date Received: 12/29/21 15:35

Sample Depth: 75'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			01/03/22 12:03	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			01/03/22 12:03	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			01/03/22 12:03	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			01/03/22 12:03	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			01/03/22 12:03	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			01/03/22 12:03	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			01/03/22 12:03	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			01/03/22 12:03	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			01/03/22 12:03	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			01/03/22 12:03	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			01/03/22 12:03	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			01/03/22 12:03	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			01/03/22 12:03	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			01/03/22 12:03	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			01/03/22 12:03	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			01/03/22 12:03	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			01/03/22 12:03	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			01/03/22 12:03	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			01/03/22 12:03	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			01/03/22 12:03	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			01/03/22 12:03	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			01/03/22 12:03	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			01/03/22 12:03	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			01/03/22 12:03	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			01/03/22 12:03	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			01/03/22 12:03	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			01/03/22 12:03	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			01/03/22 12:03	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			01/03/22 12:03	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			01/03/22 12:03	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			01/03/22 12:03	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 12:03	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			01/03/22 12:03	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			01/03/22 12:03	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			01/03/22 12:03	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			01/03/22 12:03	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			01/03/22 12:03	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			01/03/22 12:03	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			01/03/22 12:03	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			01/03/22 12:03	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			01/03/22 12:03	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			01/03/22 12:03	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			01/03/22 12:03	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			01/03/22 12:03	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			01/03/22 12:03	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			01/03/22 12:03	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			01/03/22 12:03	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			01/03/22 12:03	1

Eurofins Xenco

Client Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-1

Lab Sample ID: 880-9759-1

Date Collected: 12/29/21 10:00

Matrix: Water

Date Received: 12/29/21 15:35

Sample Depth: 75'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			01/03/22 12:03	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			01/03/22 12:03	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 12:03	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 12:03	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			01/03/22 12:03	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			01/03/22 12:03	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			01/03/22 12:03	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			01/03/22 12:03	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			01/03/22 12:03	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			01/03/22 12:03	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			01/03/22 12:03	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			01/03/22 12:03	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			01/03/22 12:03	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			01/03/22 12:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		01/03/22 12:03	1
Dibromofluoromethane (Surr)	98		75 - 131		01/03/22 12:03	1
1,2-Dichloroethane-d4 (Surr)	96		63 - 144		01/03/22 12:03	1
Toluene-d8 (Surr)	98		80 - 117		01/03/22 12:03	1

Method: 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			01/04/22 10:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.935	U	4.73	0.935 mg/L		01/03/22 14:05	01/03/22 16:18	1
Diesel Range Organics (Over C10-C28)	<0.935	U	4.73	0.935 mg/L		01/03/22 14:05	01/03/22 16:18	1
Oil Range Organics (Over C28-C36)	<0.902	U	4.73	0.902 mg/L		01/03/22 14:05	01/03/22 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 135	01/03/22 14:05	01/03/22 16:18	1
o-Terphenyl	98		70 - 135	01/03/22 14:05	01/03/22 16:18	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		0.500	0.200 mg/L			12/31/21 02:56	1
Nitrate as N	0.205		0.100	0.0391 mg/L			12/31/21 02:56	1
Fluoride	0.591		0.500	0.100 mg/L			12/31/21 02:56	1
Nitrite as N	0.295		0.100	0.0293 mg/L			12/31/21 02:56	1
Sulfate	42.2		0.500	0.109 mg/L			12/31/21 02:56	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	302		4.00	4.00 mg/L			01/03/22 14:00	1
Bicarbonate Alkalinity as CaCO3	302		4.00	4.00 mg/L			01/03/22 14:00	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			01/03/22 14:00	1

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Client Sample Results

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

Job ID: 880-9759-1

Client Sample ID: MW-1

Lab Sample ID: 880-9759-1

Date Collected: 12/29/21 10:00

Matrix: Water

Date Received: 12/29/21 15:35

Sample Depth: 75'

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	316			mg/L			01/05/22 11:29	1
Carbon Dioxide, Free	50.2			mg/L			01/05/22 11:29	1
pH	7.3	HF		SU			01/03/22 16:36	1
Temperature	18.1	HF		Celsius			01/03/22 16:36	1
Sulfide	<0.495	U	5.00	0.495 mg/L			01/02/22 16:58	1

Client Sample ID: MW-2

Lab Sample ID: 880-9759-2

Date Collected: 12/29/21 11:30

Matrix: Water

Date Received: 12/29/21 15:35

Sample Depth: 85'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0257		0.00100	0.000214 mg/L			01/03/22 12:23	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			01/03/22 12:23	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			01/03/22 12:23	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			01/03/22 12:23	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			01/03/22 12:23	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			01/03/22 12:23	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			01/03/22 12:23	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			01/03/22 12:23	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			01/03/22 12:23	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			01/03/22 12:23	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			01/03/22 12:23	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			01/03/22 12:23	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			01/03/22 12:23	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			01/03/22 12:23	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			01/03/22 12:23	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			01/03/22 12:23	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			01/03/22 12:23	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			01/03/22 12:23	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			01/03/22 12:23	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			01/03/22 12:23	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			01/03/22 12:23	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			01/03/22 12:23	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			01/03/22 12:23	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			01/03/22 12:23	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			01/03/22 12:23	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			01/03/22 12:23	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			01/03/22 12:23	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			01/03/22 12:23	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			01/03/22 12:23	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			01/03/22 12:23	1
Ethylbenzene	0.0131		0.00100	0.000515 mg/L			01/03/22 12:23	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 12:23	1
Isopropylbenzene	0.00356		0.00100	0.000161 mg/L			01/03/22 12:23	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			01/03/22 12:23	1
m,p-Xylenes	0.0738		0.0100	0.000330 mg/L			01/03/22 12:23	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			01/03/22 12:23	1

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Client Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

Client Sample ID: MW-2

Lab Sample ID: 880-9759-2

Date Collected: 12/29/21 11:30

Matrix: Water

Date Received: 12/29/21 15:35

Sample Depth: 85'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			01/03/22 12:23	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			01/03/22 12:23	1
N-Propylbenzene	0.000712	J	0.00100	0.000179 mg/L			01/03/22 12:23	1
o-Xylene	0.0147		0.00100	0.000192 mg/L			01/03/22 12:23	1
p-Cymene (p-Isopropyltoluene)	0.000356	J	0.00100	0.000233 mg/L			01/03/22 12:23	1
sec-Butylbenzene	0.000412	J	0.00100	0.000199 mg/L			01/03/22 12:23	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			01/03/22 12:23	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			01/03/22 12:23	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			01/03/22 12:23	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			01/03/22 12:23	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			01/03/22 12:23	1
Toluene	0.0232		0.00100	0.000500 mg/L			01/03/22 12:23	1
trans-1,2-Dichloroethene	<0.000256	U	0.00100	0.000256 mg/L			01/03/22 12:23	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			01/03/22 12:23	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 12:23	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 12:23	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			01/03/22 12:23	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			01/03/22 12:23	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			01/03/22 12:23	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			01/03/22 12:23	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			01/03/22 12:23	1
1,2,4-Trimethylbenzene	0.0148		0.00100	0.000252 mg/L			01/03/22 12:23	1
1,3,5-Trimethylbenzene	0.00395		0.00100	0.000279 mg/L			01/03/22 12:23	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			01/03/22 12:23	1
Xylenes, Total	0.0885		0.0100	0.000330 mg/L			01/03/22 12:23	1
Total BTEX	0.151		0.0100	0.00100 mg/L			01/03/22 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		74 - 124		01/03/22 12:23	1
Dibromofluoromethane (Surr)	99		75 - 131		01/03/22 12:23	1
1,2-Dichloroethane-d4 (Surr)	100		63 - 144		01/03/22 12:23	1
Toluene-d8 (Surr)	95		80 - 117		01/03/22 12:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1.15	J	4.73	0.935 mg/L			01/04/22 10:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1.15	J	4.73	0.935 mg/L		01/03/22 14:05	01/04/22 10:16	1
Diesel Range Organics (Over C10-C28)	<0.935	U	4.73	0.935 mg/L		01/03/22 14:05	01/04/22 10:16	1
Oil Range Organics (Over C28-C36)	<0.902	U	4.73	0.902 mg/L		01/03/22 14:05	01/04/22 10:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 135	01/03/22 14:05	01/04/22 10:16	1
o-Terphenyl	98		70 - 135	01/03/22 14:05	01/04/22 10:16	1

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Client Sample Results

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

Job ID: 880-9759-1

Client Sample ID: MW-2
Date Collected: 12/29/21 11:30
Date Received: 12/29/21 15:35
Sample Depth: 85'

Lab Sample ID: 880-9759-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		0.500	0.200	mg/L			12/31/21 03:22	1
Nitrate as N	1.02		0.100	0.0391	mg/L			12/31/21 03:22	1
Fluoride	<0.100	U	0.500	0.100	mg/L			12/31/21 03:22	1
Nitrite as N	0.415		0.100	0.0293	mg/L			12/31/21 03:22	1
Sulfate	115		0.500	0.109	mg/L			12/31/21 03:22	1

General Chemistry									
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1280		4.00	4.00	mg/L			01/03/22 14:18	1
Bicarbonate Alkalinity as CaCO3	1280		4.00	4.00	mg/L			01/03/22 14:18	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			01/03/22 14:18	1
Carbon dioxide	2370				mg/L			01/05/22 11:29	1
Carbon Dioxide, Free	1250				mg/L			01/05/22 11:29	1
pH	6.3	HF			SU			01/03/22 16:36	1
Temperature	18.0	HF			Celsius			01/03/22 16:36	1
Sulfide	<0.495	U	5.00	0.495	mg/L			01/02/22 16:58	1

Surrogate Summary

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

Job ID: 880-9759-1

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	BFB (74-124)	DBFM (75-131)	DCA (63-144)	TOL (80-117)
860-18227-A-6 MS	Matrix Spike	96	98	92	96
880-9759-1	MW-1	98	98	96	98
880-9759-2	MW-2	94	99	100	95
LCS 860-36168/3	Lab Control Sample	96	100	94	97
LCSD 860-36168/4	Lab Control Sample Dup	95	99	94	96
MB 860-36168/9	Method Blank	98	97	94	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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-135)	OTPH1 (70-135)
880-9759-1	MW-1	98	98
880-9759-1 MS	MW-1	100	103
880-9759-2 - RA	MW-2	98	98
LCS 860-36262/2-A	Lab Control Sample	112	109
LCSD 860-36262/3-A	Lab Control Sample Dup	109	101
MB 860-36262/1-A	Method Blank	101	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-36168/9

Matrix: Water

Analysis Batch: 36168

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000214	U	0.00100	0.000214 mg/L			01/03/22 11:22	1
Bromobenzene	<0.000300	U	0.00100	0.000300 mg/L			01/03/22 11:22	1
Bromochloromethane	<0.000209	U	0.00100	0.000209 mg/L			01/03/22 11:22	1
Bromodichloromethane	<0.000231	U	0.00100	0.000231 mg/L			01/03/22 11:22	1
Bromoform	<0.000630	U	0.00500	0.000630 mg/L			01/03/22 11:22	1
Bromomethane	<0.00105	U	0.00500	0.00105 mg/L			01/03/22 11:22	1
2-Butanone	<0.00270	U	0.0500	0.00270 mg/L			01/03/22 11:22	1
Carbon tetrachloride	<0.000423	U	0.00500	0.000423 mg/L			01/03/22 11:22	1
Chlorobenzene	<0.000159	U	0.00100	0.000159 mg/L			01/03/22 11:22	1
Chloroethane	<0.000433	U	0.0100	0.000433 mg/L			01/03/22 11:22	1
Chloroform	<0.000259	U	0.00100	0.000259 mg/L			01/03/22 11:22	1
Chloromethane	<0.000318	U	0.0100	0.000318 mg/L			01/03/22 11:22	1
2-Chlorotoluene	<0.000214	U	0.00100	0.000214 mg/L			01/03/22 11:22	1
4-Chlorotoluene	<0.000183	U	0.00100	0.000183 mg/L			01/03/22 11:22	1
cis-1,2-Dichloroethene	<0.000174	U	0.00100	0.000174 mg/L			01/03/22 11:22	1
cis-1,3-Dichloropropene	<0.000690	U	0.00500	0.000690 mg/L			01/03/22 11:22	1
Dibromochloromethane	<0.000739	U	0.00500	0.000739 mg/L			01/03/22 11:22	1
1,2-Dibromo-3-Chloropropane	<0.000319	U	0.00500	0.000319 mg/L			01/03/22 11:22	1
1,2-Dibromoethane	<0.000337	U	0.00500	0.000337 mg/L			01/03/22 11:22	1
1,2-Dichlorobenzene	<0.000236	U	0.00100	0.000236 mg/L			01/03/22 11:22	1
1,3-Dichlorobenzene	<0.000197	U	0.00100	0.000197 mg/L			01/03/22 11:22	1
1,4-Dichlorobenzene	<0.000199	U	0.00100	0.000199 mg/L			01/03/22 11:22	1
Dichlorodifluoromethane	<0.000316	U	0.00100	0.000316 mg/L			01/03/22 11:22	1
1,1-Dichloroethane	<0.000244	U	0.00100	0.000244 mg/L			01/03/22 11:22	1
1,2-Dichloroethane	<0.000285	U	0.00100	0.000285 mg/L			01/03/22 11:22	1
1,1-Dichloroethene	<0.000216	U	0.00100	0.000216 mg/L			01/03/22 11:22	1
1,2-Dichloropropane	<0.000396	U	0.00500	0.000396 mg/L			01/03/22 11:22	1
1,3-Dichloropropane	<0.000439	U	0.00500	0.000439 mg/L			01/03/22 11:22	1
2,2-Dichloropropane	<0.000360	U	0.00500	0.000360 mg/L			01/03/22 11:22	1
1,1-Dichloropropene	<0.000481	U	0.00500	0.000481 mg/L			01/03/22 11:22	1
Ethylbenzene	<0.000515	U	0.00100	0.000515 mg/L			01/03/22 11:22	1
Hexachlorobutadiene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 11:22	1
Isopropylbenzene	<0.000161	U	0.00100	0.000161 mg/L			01/03/22 11:22	1
Methylene Chloride	<0.00191	U	0.00500	0.00191 mg/L			01/03/22 11:22	1
m,p-Xylenes	<0.000330	U	0.0100	0.000330 mg/L			01/03/22 11:22	1
MTBE	<0.000571	U	0.00500	0.000571 mg/L			01/03/22 11:22	1
Naphthalene	<0.00200	U	0.0100	0.00200 mg/L			01/03/22 11:22	1
n-Butylbenzene	<0.000286	U	0.00100	0.000286 mg/L			01/03/22 11:22	1
N-Propylbenzene	<0.000179	U	0.00100	0.000179 mg/L			01/03/22 11:22	1
o-Xylene	<0.000192	U	0.00100	0.000192 mg/L			01/03/22 11:22	1
p-Cymene (p-Isopropyltoluene)	<0.000233	U	0.00100	0.000233 mg/L			01/03/22 11:22	1
sec-Butylbenzene	<0.000199	U	0.00100	0.000199 mg/L			01/03/22 11:22	1
Styrene	<0.000623	U	0.00100	0.000623 mg/L			01/03/22 11:22	1
tert-Butylbenzene	<0.000195	U	0.00100	0.000195 mg/L			01/03/22 11:22	1
1,1,1,2-Tetrachloroethane	<0.000327	U	0.00100	0.000327 mg/L			01/03/22 11:22	1
1,1,2,2-Tetrachloroethane	<0.000284	U	0.00100	0.000284 mg/L			01/03/22 11:22	1
Tetrachloroethene	<0.000500	U	0.00100	0.000500 mg/L			01/03/22 11:22	1
Toluene	<0.000500	U	0.00100	0.000500 mg/L			01/03/22 11:22	1

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QC Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: MB 860-36168/9

Matrix: Water

Analysis Batch: 36168

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	<0.000256	U	0.00100	0.000256 mg/L			01/03/22 11:22	1
trans-1,3-Dichloropropene	<0.000752	U	0.00500	0.000752 mg/L			01/03/22 11:22	1
1,2,3-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 11:22	1
1,2,4-Trichlorobenzene	<0.00200	U	0.00500	0.00200 mg/L			01/03/22 11:22	1
1,1,1-Trichloroethane	<0.000504	U	0.00500	0.000504 mg/L			01/03/22 11:22	1
1,1,2-Trichloroethane	<0.000228	U	0.00100	0.000228 mg/L			01/03/22 11:22	1
Trichloroethene	<0.000424	U	0.00500	0.000424 mg/L			01/03/22 11:22	1
Trichlorofluoromethane	<0.000245	U	0.00100	0.000245 mg/L			01/03/22 11:22	1
1,2,3-Trichloropropane	<0.000283	U	0.00100	0.000283 mg/L			01/03/22 11:22	1
1,2,4-Trimethylbenzene	<0.000252	U	0.00100	0.000252 mg/L			01/03/22 11:22	1
1,3,5-Trimethylbenzene	<0.000279	U	0.00100	0.000279 mg/L			01/03/22 11:22	1
Vinyl chloride	<0.000234	U	0.00200	0.000234 mg/L			01/03/22 11:22	1
Xylenes, Total	<0.000330	U	0.0100	0.000330 mg/L			01/03/22 11:22	1
Total BTEX	<0.00100	U	0.0100	0.00100 mg/L			01/03/22 11:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		74 - 124		01/03/22 11:22	1
Dibromofluoromethane (Surr)	97		75 - 131		01/03/22 11:22	1
1,2-Dichloroethane-d4 (Surr)	94		63 - 144		01/03/22 11:22	1
Toluene-d8 (Surr)	100		80 - 117		01/03/22 11:22	1

Lab Sample ID: LCS 860-36168/3

Matrix: Water

Analysis Batch: 36168

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	0.04595		mg/L		92	66 - 142
Bromobenzene	0.0500	0.04787		mg/L		96	75 - 125
Bromochloromethane	0.0500	0.04805		mg/L		96	60 - 140
Bromodichloromethane	0.0500	0.04644		mg/L		93	75 - 125
Bromoform	0.0500	0.05050		mg/L		101	75 - 125
Bromomethane	0.0500	0.03927		mg/L		79	60 - 140
2-Butanone	0.250	0.2465		mg/L		99	60 - 140
Carbon tetrachloride	0.0500	0.04566		mg/L		91	62 - 125
Chlorobenzene	0.0500	0.04673		mg/L		93	60 - 133
Chloroethane	0.0500	0.04369		mg/L		87	60 - 140
Chloroform	0.0500	0.04615		mg/L		92	70 - 130
Chloromethane	0.0500	0.04255		mg/L		85	60 - 140
2-Chlorotoluene	0.0500	0.04604		mg/L		92	73 - 125
4-Chlorotoluene	0.0500	0.04630		mg/L		93	74 - 125
cis-1,2-Dichloroethene	0.0500	0.04624		mg/L		92	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04583		mg/L		92	74 - 125
Dibromochloromethane	0.0500	0.04880		mg/L		98	73 - 125
1,2-Dibromo-3-Chloropropane	0.0500	0.04997		mg/L		100	59 - 125
1,2-Dibromoethane	0.0500	0.04802		mg/L		96	73 - 125
1,2-Dichlorobenzene	0.0500	0.04743		mg/L		95	75 - 125
1,3-Dichlorobenzene	0.0500	0.04727		mg/L		95	75 - 125
1,4-Dichlorobenzene	0.0500	0.04790		mg/L		96	75 - 125

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QC Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCS 860-36168/3

Matrix: Water

Analysis Batch: 36168

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	0.0500	0.03748		mg/L		75	70 - 130
1,1-Dichloroethane	0.0500	0.04508		mg/L		90	72 - 125
1,2-Dichloroethane	0.0500	0.04409		mg/L		88	68 - 127
1,1-Dichloroethene	0.0500	0.04686		mg/L		94	59 - 172
1,2-Dichloropropane	0.0500	0.04596		mg/L		92	74 - 125
1,3-Dichloropropane	0.0500	0.04610		mg/L		92	75 - 125
2,2-Dichloropropane	0.0500	0.04700		mg/L		94	75 - 125
1,1-Dichloropropene	0.0500	0.04574		mg/L		91	75 - 125
Ethylbenzene	0.0500	0.04600		mg/L		92	75 - 125
Hexachlorobutadiene	0.0500	0.05060		mg/L		101	75 - 125
Isopropylbenzene	0.0500	0.04665		mg/L		93	75 - 125
Methylene Chloride	0.0500	0.04715		mg/L		94	75 - 125
m,p-Xylenes	0.0500	0.04653		mg/L		93	75 - 125
MTBE	0.0500	0.04789		mg/L		96	65 - 135
Naphthalene	0.0500	0.04901		mg/L		98	70 - 130
n-Butylbenzene	0.0500	0.04709		mg/L		94	75 - 125
N-Propylbenzene	0.0500	0.04633		mg/L		93	75 - 125
o-Xylene	0.0500	0.04620		mg/L		92	75 - 125
p-Cymene (p-Isopropyltoluene)	0.0500	0.04741		mg/L		95	75 - 125
sec-Butylbenzene	0.0500	0.04716		mg/L		94	75 - 125
Styrene	0.0500	0.04583		mg/L		92	75 - 125
tert-Butylbenzene	0.0500	0.04716		mg/L		94	75 - 125
1,1,1,2-Tetrachloroethane	0.0500	0.04717		mg/L		94	72 - 125
1,1,2,2-Tetrachloroethane	0.0500	0.04944		mg/L		99	74 - 125
Tetrachloroethene	0.0500	0.04824		mg/L		96	71 - 125
Toluene	0.0500	0.04581		mg/L		92	59 - 139
trans-1,2-Dichloroethene	0.0500	0.04617		mg/L		92	75 - 125
trans-1,3-Dichloropropene	0.0500	0.04631		mg/L		93	66 - 125
1,2,3-Trichlorobenzene	0.0500	0.04726		mg/L		95	75 - 137
1,2,4-Trichlorobenzene	0.0500	0.05081		mg/L		102	75 - 135
1,1,1-Trichloroethane	0.0500	0.04537		mg/L		91	75 - 125
1,1,2-Trichloroethane	0.0500	0.04850		mg/L		97	75 - 127
Trichloroethene	0.0500	0.04759		mg/L		95	62 - 137
Trichlorofluoromethane	0.0500	0.04610		mg/L		92	60 - 140
1,2,3-Trichloropropane	0.0500	0.04669		mg/L		93	75 - 125
1,2,4-Trimethylbenzene	0.0500	0.04676		mg/L		94	75 - 125
1,3,5-Trimethylbenzene	0.0500	0.04661		mg/L		93	60 - 140
Vinyl chloride	0.0500	0.04203		mg/L		84	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		74 - 124
Dibromofluoromethane (Surr)	100		75 - 131
1,2-Dichloroethane-d4 (Surr)	94		63 - 144
Toluene-d8 (Surr)	97		80 - 117

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QC Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-36168/4

Matrix: Water

Analysis Batch: 36168

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	0.04660		mg/L		93	66 - 142	1	25
Bromobenzene	0.0500	0.04729		mg/L		95	75 - 125	1	25
Bromochloromethane	0.0500	0.04697		mg/L		94	60 - 140	2	25
Bromodichloromethane	0.0500	0.04671		mg/L		93	75 - 125	1	25
Bromoform	0.0500	0.04977		mg/L		100	75 - 125	1	25
Bromomethane	0.0500	0.03967		mg/L		79	60 - 140	1	25
2-Butanone	0.250	0.2299		mg/L		92	60 - 140	7	25
Carbon tetrachloride	0.0500	0.04523		mg/L		90	62 - 125	1	25
Chlorobenzene	0.0500	0.04691		mg/L		94	60 - 133	0	25
Chloroethane	0.0500	0.04527		mg/L		91	60 - 140	4	25
Chloroform	0.0500	0.04573		mg/L		91	70 - 130	1	25
Chloromethane	0.0500	0.04356		mg/L		87	60 - 140	2	25
2-Chlorotoluene	0.0500	0.04565		mg/L		91	73 - 125	1	25
4-Chlorotoluene	0.0500	0.04546		mg/L		91	74 - 125	2	25
cis-1,2-Dichloroethene	0.0500	0.04559		mg/L		91	75 - 125	1	25
cis-1,3-Dichloropropene	0.0500	0.04554		mg/L		91	74 - 125	1	25
Dibromochloromethane	0.0500	0.04855		mg/L		97	73 - 125	1	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04953		mg/L		99	59 - 125	1	25
1,2-Dibromoethane	0.0500	0.04714		mg/L		94	73 - 125	2	25
1,2-Dichlorobenzene	0.0500	0.04703		mg/L		94	75 - 125	1	25
1,3-Dichlorobenzene	0.0500	0.04720		mg/L		94	75 - 125	0	25
1,4-Dichlorobenzene	0.0500	0.04772		mg/L		95	75 - 125	0	25
Dichlorodifluoromethane	0.0500	0.03862		mg/L		77	70 - 130	3	25
1,1-Dichloroethane	0.0500	0.04471		mg/L		89	72 - 125	1	25
1,2-Dichloroethane	0.0500	0.04438		mg/L		89	68 - 127	1	25
1,1-Dichloroethene	0.0500	0.04667		mg/L		93	59 - 172	0	25
1,2-Dichloropropane	0.0500	0.04664		mg/L		93	74 - 125	1	25
1,3-Dichloropropane	0.0500	0.04522		mg/L		90	75 - 125	2	25
2,2-Dichloropropane	0.0500	0.04698		mg/L		94	75 - 125	0	25
1,1-Dichloropropene	0.0500	0.04606		mg/L		92	75 - 125	1	25
Ethylbenzene	0.0500	0.04614		mg/L		92	75 - 125	0	25
Hexachlorobutadiene	0.0500	0.05214		mg/L		104	75 - 125	3	25
Isopropylbenzene	0.0500	0.04716		mg/L		94	75 - 125	1	25
Methylene Chloride	0.0500	0.04581		mg/L		92	75 - 125	3	25
m,p-Xylenes	0.0500	0.04666		mg/L		93	75 - 125	0	25
MTBE	0.0500	0.04637		mg/L		93	65 - 135	3	25
Naphthalene	0.0500	0.05460		mg/L		109	70 - 130	11	25
n-Butylbenzene	0.0500	0.04730		mg/L		95	75 - 125	0	25
N-Propylbenzene	0.0500	0.04587		mg/L		92	75 - 125	1	25
o-Xylene	0.0500	0.04690		mg/L		94	75 - 125	2	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.04753		mg/L		95	75 - 125	0	25
sec-Butylbenzene	0.0500	0.04715		mg/L		94	75 - 125	0	25
Styrene	0.0500	0.04621		mg/L		92	75 - 125	1	25
tert-Butylbenzene	0.0500	0.04682		mg/L		94	75 - 125	1	25
1,1,1,2-Tetrachloroethane	0.0500	0.04725		mg/L		95	72 - 125	0	25
1,1,2,2-Tetrachloroethane	0.0500	0.04783		mg/L		96	74 - 125	3	25
Tetrachloroethene	0.0500	0.04884		mg/L		98	71 - 125	1	25
Toluene	0.0500	0.04578		mg/L		92	59 - 139	0	25

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QC Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-36168/4

Matrix: Water

Analysis Batch: 36168

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	0.04617		mg/L		92	75 - 125	0	25
trans-1,3-Dichloropropene	0.0500	0.04539		mg/L		91	66 - 125	2	25
1,2,3-Trichlorobenzene	0.0500	0.05288		mg/L		106	75 - 137	11	25
1,2,4-Trichlorobenzene	0.0500	0.05383		mg/L		108	75 - 135	6	25
1,1,1-Trichloroethane	0.0500	0.04572		mg/L		91	75 - 125	1	25
1,1,2-Trichloroethane	0.0500	0.04771		mg/L		95	75 - 127	2	25
Trichloroethene	0.0500	0.04842		mg/L		97	62 - 137	2	25
Trichlorofluoromethane	0.0500	0.04759		mg/L		95	60 - 140	3	25
1,2,3-Trichloropropane	0.0500	0.04639		mg/L		93	75 - 125	1	25
1,2,4-Trimethylbenzene	0.0500	0.04653		mg/L		93	75 - 125	0	25
1,3,5-Trimethylbenzene	0.0500	0.04603		mg/L		92	60 - 140	1	25
Vinyl chloride	0.0500	0.04295		mg/L		86	60 - 140	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		74 - 124
Dibromofluoromethane (Surr)	99		75 - 131
1,2-Dichloroethane-d4 (Surr)	94		63 - 144
Toluene-d8 (Surr)	96		80 - 117

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

Lab Sample ID: MB 860-36262/1-A

Matrix: Water

Analysis Batch: 36189

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36262

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		01/03/22 14:05	01/03/22 15:16	1
Diesel Range Organics (Over C10-C28)	<0.988	U	5.00	0.988 mg/L		01/03/22 14:05	01/03/22 15:16	1
Oil Range Organics (Over C28-C36)	<0.954	U	5.00	0.954 mg/L		01/03/22 14:05	01/03/22 15:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 135	01/03/22 14:05	01/03/22 15:16	1
o-Terphenyl	102		70 - 135	01/03/22 14:05	01/03/22 15:16	1

Lab Sample ID: LCS 860-36262/2-A

Matrix: Water

Analysis Batch: 36189

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	99.5	87.48		mg/L		88	70 - 135
Diesel Range Organics (Over C10-C28)	99.8	96.25		mg/L		96	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	112		70 - 135
o-Terphenyl	109		70 - 135

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QC Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

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

Lab Sample ID: LCSD 860-36262/3-A

Matrix: Water

Analysis Batch: 36189

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36262

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	99.5	90.76		mg/L		91	70 - 135	4	35
Diesel Range Organics (Over C10-C28)	99.8	94.39		mg/L		95	70 - 135	2	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	109		70 - 135						
o-Terphenyl	101		70 - 135						

Lab Sample ID: 880-9759-1 MS

Matrix: Water

Analysis Batch: 36189

Client Sample ID: MW-1

Prep Type: Total/NA

Prep Batch: 36262

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<0.935	U	93.6	89.66		mg/L		96	70 - 135		
Diesel Range Organics (Over C10-C28)	<0.935	U	93.9	88.87		mg/L		95	70 - 135		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	100		70 - 135								
o-Terphenyl	103		70 - 135								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-36084/39

Matrix: Water

Analysis Batch: 36084

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.200	U	0.500	0.200 mg/L			12/30/21 19:00	1
Fluoride	<0.100	U	0.500	0.100 mg/L			12/30/21 19:00	1
Sulfate	<0.109	U	0.500	0.109 mg/L			12/30/21 19:00	1

Lab Sample ID: LCS 860-36084/40

Matrix: Water

Analysis Batch: 36084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.36		mg/L		104	90 - 110		
Fluoride	10.0	10.47		mg/L		105	90 - 110		
Sulfate	10.0	10.04		mg/L		100	90 - 110		

Lab Sample ID: LCSD 860-36084/41

Matrix: Water

Analysis Batch: 36084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.30		mg/L		103	90 - 110	1	20
Fluoride	10.0	10.48		mg/L		105	90 - 110	0	20

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QC Sample Results

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-36084/41

Matrix: Water

Analysis Batch: 36084

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.01		mg/L		100	90 - 110	0	20

Lab Sample ID: MB 860-36085/39

Matrix: Water

Analysis Batch: 36085

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			12/30/21 19:00	1
Nitrite as N	<0.0293	U	0.100	0.0293 mg/L			12/30/21 19:00	1

Lab Sample ID: LCS 860-36085/40

Matrix: Water

Analysis Batch: 36085

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	10.04	E	mg/L		100	80 - 120
Nitrite as N	5.00	5.220		mg/L		104	80 - 120

Lab Sample ID: LCSD 860-36085/41

Matrix: Water

Analysis Batch: 36085

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	10.04	E	mg/L		100	80 - 120	0	20
Nitrite as N	5.00	5.234		mg/L		105	80 - 120	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-36292/4

Matrix: Water

Analysis Batch: 36292

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			01/03/22 12:53	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			01/03/22 12:53	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00 mg/L			01/03/22 12:53	1

Lab Sample ID: LCS 860-36292/5

Matrix: Water

Analysis Batch: 36292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	250	234.6		mg/L		94	85 - 115

Lab Sample ID: LCSD 860-36292/6

Matrix: Water

Analysis Batch: 36292

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	236.4		mg/L		95	85 - 115	1	20

Eurofins Xenco

QC Sample Results

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

Job ID: 880-9759-1

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-9759-1 DU
Matrix: Water
Analysis Batch: 36286

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.3	HF	7.4		SU		1	20
Temperature	18.1	HF	18.2		Celsius		0.6	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 860-36734/3
Matrix: Water
Analysis Batch: 36734

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			01/02/22 16:58	1

Lab Sample ID: LCS 860-36734/4
Matrix: Water
Analysis Batch: 36734

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.900	0.9194	J	mg/L		102	80 - 120

Lab Sample ID: LCSD 860-36734/5
Matrix: Water
Analysis Batch: 36734

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	0.900	0.9223	J	mg/L		102	80 - 120	0	20

QC Association Summary

Client: Ensolum

Job ID: 880-9759-1

Project/Site: South Hobbs - 03B1417002

GC/MS VOA

Analysis Batch: 36168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	8260C	
880-9759-2	MW-2	Total/NA	Water	8260C	
MB 860-36168/9	Method Blank	Total/NA	Water	8260C	
LCS 860-36168/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-36168/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC Semi VOA

Analysis Batch: 35920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	8015 NM	
880-9759-2	MW-2	Total/NA	Water	8015 NM	

Analysis Batch: 36189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	8015B NM	36262
MB 860-36262/1-A	Method Blank	Total/NA	Water	8015B NM	36262
LCS 860-36262/2-A	Lab Control Sample	Total/NA	Water	8015B NM	36262
LCSD 860-36262/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	36262
880-9759-1 MS	MW-1	Total/NA	Water	8015B NM	36262

Prep Batch: 36262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	8015NM Aq Prep	
880-9759-2 - RA	MW-2	Total/NA	Water	8015NM Aq Prep	
MB 860-36262/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 860-36262/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 860-36262/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	
880-9759-1 MS	MW-1	Total/NA	Water	8015NM Aq Prep	

Analysis Batch: 36342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-2 - RA	MW-2	Total/NA	Water	8015B NM	36262

HPLC/IC

Analysis Batch: 36084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	300.0	
880-9759-2	MW-2	Total/NA	Water	300.0	
MB 860-36084/39	Method Blank	Total/NA	Water	300.0	
LCS 860-36084/40	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-36084/41	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 36085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	300.0	
880-9759-2	MW-2	Total/NA	Water	300.0	
MB 860-36085/39	Method Blank	Total/NA	Water	300.0	
LCS 860-36085/40	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-36085/41	Lab Control Sample Dup	Total/NA	Water	300.0	

Eurofins Xenco

QC Association Summary

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

Job ID: 880-9759-1

General Chemistry

Analysis Batch: 36286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	SM 4500 H+ B	
880-9759-2	MW-2	Total/NA	Water	SM 4500 H+ B	
880-9759-1 DU	MW-1	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 36292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	SM 2320B	
880-9759-2	MW-2	Total/NA	Water	SM 2320B	
MB 860-36292/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-36292/5	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-36292/6	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 36531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	SM 4500 CO2 D	
880-9759-2	MW-2	Total/NA	Water	SM 4500 CO2 D	

Analysis Batch: 36734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9759-1	MW-1	Total/NA	Water	SM 4500 S2 F	
880-9759-2	MW-2	Total/NA	Water	SM 4500 S2 F	
MB 860-36734/3	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 860-36734/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 860-36734/5	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	

Lab Chronicle

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

Job ID: 880-9759-1

Client Sample ID: MW-1

Date Collected: 12/29/21 10:00

Date Received: 12/29/21 15:35

Lab Sample ID: 880-9759-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	36168	01/03/22 12:03	TTD	XEN STF
Total/NA	Analysis	8015 NM		1	35920	01/04/22 10:13	DD	XEN STF
Total/NA	Prep	8015NM Aq Prep			36262	01/03/22 14:05	IS	XEN STF
Total/NA	Analysis	8015B NM		1	36189	01/03/22 16:18	IS	XEN STF
Total/NA	Analysis	300.0		1	36084	12/31/21 02:56	ANP	XEN STF
Total/NA	Analysis	300.0		1	36085	12/31/21 02:56	ANP	XEN STF
Total/NA	Analysis	SM 2320B		1	36292	01/03/22 14:00	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	36531	01/05/22 11:29	ANP	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	36286	01/03/22 16:36	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	36734	01/02/22 16:58	YVD	XEN STF

Client Sample ID: MW-2

Date Collected: 12/29/21 11:30

Date Received: 12/29/21 15:35

Lab Sample ID: 880-9759-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	36168	01/03/22 12:23	TTD	XEN STF
Total/NA	Analysis	8015 NM		1	35920	01/04/22 10:13	DD	XEN STF
Total/NA	Prep	8015NM Aq Prep	RA		36262	01/03/22 14:05	IS	XEN STF
Total/NA	Analysis	8015B NM	RA	1	36342	01/04/22 10:16	IS	XEN STF
Total/NA	Analysis	300.0		1	36084	12/31/21 03:22	ANP	XEN STF
Total/NA	Analysis	300.0		1	36085	12/31/21 03:22	ANP	XEN STF
Total/NA	Analysis	SM 2320B		1	36292	01/03/22 14:18	YGG	XEN STF
Total/NA	Analysis	SM 4500 CO2 D		1	36531	01/05/22 11:29	ANP	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1	36286	01/03/22 16:36	TL	XEN STF
Total/NA	Analysis	SM 4500 S2 F		1	36734	01/02/22 16:58	YVD	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 880-9759-1

Laboratory: Eurofins Xenco

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

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)
8260C		Water	Total BTEX
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: 880-9759-1

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

Protocol References:

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

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

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

Laboratory References:

XEN STF = Eurofins Xenco, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 880-9759-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-9759-1	MW-1	Water	12/29/21 10:00	12/29/21 15:35	75'
880-9759-2	MW-2	Water	12/29/21 11:30	12/29/21 15:35	85'

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



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) 555-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (602) 335-0800 Atlanta, GA (770) 449-8800 Tampa, FL (813) 233-3333
Hobbs, NM (575) 392-7550

Chain of Custody

Work Order No:

1/7/2022

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

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project: <i>New Mexico</i>	
Reporting Level II ☐ Level III ☐ PST/UST ☐ ITRRP ☐ 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:		Aaron Marquez	Due Date			
SAMPLE RECEIPT						
Temperature (°C).	Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐		
Received Intact:	(Yes) No	Thermometer ID				
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	
		MW-1	GW	12-24-21	1000	75'
		MW-2	GW	12-29-21	1180	85'
ANALYSIS REQUEST						
Number of Containers						
Dissolved Carbon Dioxide 4500 CO ₂ 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						
						
880-9759 Chain of Custody						

Notice: Signature of this document will constitute a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$3 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

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 		12/29/21 15:33 ²			
3					
5					

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-9759-1

Login Number: 9759

List Source: Eurofins Xenco

List Number: 1

Creator: Teel, Brianna

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	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: 880-9759-1

Login Number: 9759

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Xenco

List Creation: 12/30/21 04:56 PM

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



ANALYTICAL REPORT

December 07, 2021

Ensolum, LLC

Sample Delivery Group: L1437069
Samples Received: 12/02/2021
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
705 W. Wadley Ave, Ste 210
Midland, TX 79705

Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "M. Beasley".

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1437069-01	9	⁶ Sr
Qc: Quality Control Summary	11	⁷ Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Gl: Glossary of Terms	17	⁸ Gl
Al: Accreditations & Locations	18	
Sc: Sample Chain of Custody	19	⁹ Al
		¹⁰ Sc

LEVEY WELL L1437069-01 Air

Collected by
Aaron Marquez

Collected date/time
12/01/21 12:00

Received date/time
12/02/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1784144	100	12/04/21 18:37	12/04/21 18:37	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1784835	5000	12/06/21 18:57	12/06/21 18:57	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1785341	100000	12/07/21 12:40	12/07/21 12:40	CAW	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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



Mark W. Beasley
Project Manager

¹ 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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 12/07/2021 17:12					
Project Name: Levey Well		Laboratory Job Number: L1437069-01					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1784144, WG1784835 and WG1785341					
#1	A2	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National			LRC Date: 12/07/2021 17:12				
Project Name: Levey Well			Laboratory Job Number: L1437069-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1784144, WG1784835 and WG1785341				
# 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: 12/07/2021 17:12	
Project Name: Levey Well		Laboratory Job Number: L1437069-01	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1784144, WG1784835 and WG1785341	
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: 12/01/21 12:00

L1437069

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	WG1784144
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1784144
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1784144
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1784144
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1784144
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1784144
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1784144
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1784144
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1784144
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1784144
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1784144
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1784144
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1784144
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1784144
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1784144
Cyclohexane	110-82-7	84.20	1000	3440	286000	985000		5000	WG1784835
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1784144
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1784144
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1784144
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1784144
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1784144
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1784144
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1784144
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1784144
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1784144
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1784144
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1784144
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1784144
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1784144
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1784144
Ethanol	64-17-5	46.10	125	236	ND	ND		100	WG1784144
Ethylbenzene	100-41-4	106	20.0	86.7	32.1	139		100	WG1784144
4-Ethyltoluene	622-96-8	120	20.0	98.2	97.5	479		100	WG1784144
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1784144
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1784144
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1784144
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1784144
Heptane	142-82-5	100	1000	4090	359000	1470000		5000	WG1784835
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1784144
n-Hexane	110-54-3	86.20	63000	222000	3970000	14000000		100000	WG1785341
Isopropylbenzene	98-82-8	120.20	20.0	98.3	28.5	140		100	WG1784144
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1784144
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1784144
2-Butanone (MEK)	78-93-3	72.10	125	369	ND	ND		100	WG1784144
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1784144
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1784144
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1784144
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1784144
2-Propanol	67-63-0	60.10	125	307	ND	ND		100	WG1784144
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1784144
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1784144
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1784144
Tetrachloroethylene	127-18-4	166	20.0	136	ND	ND		100	WG1784144
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1784144
Toluene	108-88-3	92.10	50.0	188	89.9	339		100	WG1784144
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1784144

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/01/21 12:00

L1437069

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	WG1784144
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1784144
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG1784144
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	126	618		100	WG1784144
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	158	775		100	WG1784144
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1784144
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1784144
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1784144
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1784144
m&p-Xylene	1330-20-7	106	40.0	173	81.0	351		100	WG1784144
o-Xylene	95-47-6	106	20.0	86.7	56.2	244		100	WG1784144
TPH (GC/MS) Low Fraction	8006-61-9	101	1000000	4130000	8140000	33600000		5000	WG1784835
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1784144
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1784835
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.8				WG1785341

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3737168-3 12/04/21 08:38

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,2-Dichloropropane	U		0.0760	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
1,3-Butadiene	U		0.104	2.00
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,4-Dioxane	U		0.0833	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
2-Butanone (MEK)	U		0.0814	1.25
2-Chlorotoluene	U		0.0828	0.200
2-Propanol	U		0.264	1.25
4-Ethyltoluene	U		0.0783	0.200
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
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
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Dibromochloromethane	U		0.0727	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1437069-01

Method Blank (MB)

(MB) R3737168-3 12/04/21 08:38

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Dichlorodifluoromethane	U		0.137	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
m&p-Xylene	U		0.135	0.400
Methyl Butyl Ketone	U		0.133	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Methylene Chloride	U		0.0979	0.200
Naphthalene	U		0.350	0.630
o-Xylene	U		0.0828	0.200
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
trans-1,2-Dichloroethene	U		0.0673	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
Trichloroethylene	U		0.0680	0.200
Trichlorofluoromethane	U		0.0819	0.200
Vinyl acetate	U		0.116	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl chloride	U		0.0949	0.200
(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) R3737168-1 12/04/21 07:39 • (LCSD) R3737168-2 12/04/21 08:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1-Trichloroethane	3.75	3.50	3.54	93.3	94.4	70.0-130			1.14	25
1,1,2,2-Tetrachloroethane	3.75	3.68	3.77	98.1	101	70.0-130			2.42	25
1,1,2-Trichloroethane	3.75	3.75	3.77	100	101	70.0-130			0.532	25
1,1,2-Trichlorotrifluoroethane	3.75	3.67	3.83	97.9	102	70.0-130			4.27	25
1,1-Dichloroethane	3.75	3.61	3.56	96.3	94.9	70.0-130			1.39	25
1,1-Dichloroethene	3.75	3.50	3.50	93.3	93.3	70.0-130			0.000	25
1,2,4-Trichlorobenzene	3.75	4.27	4.41	114	118	70.0-160			3.23	25
1,2,4-Trimethylbenzene	3.75	3.73	3.82	99.5	102	70.0-130			2.38	25

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

(LCS) R3737168-1 12/04/21 07:39 • (LCSD) R3737168-2 12/04/21 08:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,2-Dibromoethane	3.75	3.82	3.75	102	100	70.0-130			1.85	25
1,2-Dichlorobenzene	3.75	3.81	3.81	102	102	70.0-130			0.000	25
1,2-Dichloroethane	3.75	3.38	3.47	90.1	92.5	70.0-130			2.63	25
1,2-Dichloropropane	3.75	3.56	3.67	94.9	97.9	70.0-130			3.04	25
1,2-Dichlorotetrafluoroethane	3.75	3.65	3.75	97.3	100	70.0-130			2.70	25
1,3,5-Trimethylbenzene	3.75	3.70	3.83	98.7	102	70.0-130			3.45	25
1,3-Butadiene	3.75	3.24	3.28	86.4	87.5	70.0-130			1.23	25
1,3-Dichlorobenzene	3.75	3.92	4.00	105	107	70.0-130			2.02	25
1,4-Dichlorobenzene	3.75	3.88	4.00	103	107	70.0-130			3.05	25
1,4-Dioxane	3.75	3.68	3.74	98.1	99.7	70.0-140			1.62	25
2,2,4-Trimethylpentane	3.75	3.49	3.50	93.1	93.3	70.0-130			0.286	25
2-Butanone (MEK)	3.75	3.48	3.72	92.8	99.2	70.0-130			6.67	25
2-Chlorotoluene	3.75	3.73	3.78	99.5	101	70.0-130			1.33	25
2-Propanol	3.75	3.25	3.22	86.7	85.9	70.0-139			0.927	25
4-Ethyltoluene	3.75	3.72	3.87	99.2	103	70.0-130			3.95	25
4-Methyl-2-pentanone (MIBK)	3.75	3.54	3.58	94.4	95.5	70.0-139			1.12	25
Acetone	3.75	3.55	3.27	94.7	87.2	70.0-130			8.21	25
Allyl Chloride	3.75	3.35	3.27	89.3	87.2	70.0-130			2.42	25
Benzene	3.75	3.68	3.64	98.1	97.1	70.0-130			1.09	25
Benzyl Chloride	3.75	4.74	4.83	126	129	70.0-152			1.88	25
Bromodichloromethane	3.75	3.62	3.59	96.5	95.7	70.0-130			0.832	25
Bromoform	3.75	3.72	3.66	99.2	97.6	70.0-130			1.63	25
Bromomethane	3.75	3.66	3.79	97.6	101	70.0-130			3.49	25
Carbon disulfide	3.75	3.62	3.56	96.5	94.9	70.0-130			1.67	25
Carbon tetrachloride	3.75	3.47	3.51	92.5	93.6	70.0-130			1.15	25
Chlorobenzene	3.75	3.67	3.72	97.9	99.2	70.0-130			1.35	25
Dibromochloromethane	3.75	3.61	3.61	96.3	96.3	70.0-130			0.000	25
Chloroethane	3.75	3.53	3.57	94.1	95.2	70.0-130			1.13	25
Chloroform	3.75	3.56	3.58	94.9	95.5	70.0-130			0.560	25
Chloromethane	3.75	3.49	3.42	93.1	91.2	70.0-130			2.03	25
cis-1,2-Dichloroethene	3.75	3.42	3.54	91.2	94.4	70.0-130			3.45	25
cis-1,3-Dichloropropene	3.75	3.65	3.62	97.3	96.5	70.0-130			0.825	25
Dichlorodifluoromethane	3.75	3.61	3.75	96.3	100	64.0-139			3.80	25
Ethanol	3.75	3.55	3.48	94.7	92.8	55.0-148			1.99	25
Ethylbenzene	3.75	3.68	3.77	98.1	101	70.0-130			2.42	25
Hexachloro-1,3-butadiene	3.75	3.80	3.79	101	101	70.0-151			0.264	25
Isopropylbenzene	3.75	3.66	3.76	97.6	100	70.0-130			2.70	25
m&p-Xylene	7.50	7.33	7.59	97.7	101	70.0-130			3.49	25
Methyl Butyl Ketone	3.75	3.57	3.68	95.2	98.1	70.0-149			3.03	25
Methyl Methacrylate	3.75	3.75	3.64	100	97.1	70.0-130			2.98	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1437069-01

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

(LCS) R3737168-1 12/04/21 07:39 • (LCSD) R3737168-2 12/04/21 08:09

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	3.58	3.65	95.5	97.3	70.0-130			1.94	25
Methylene Chloride	3.75	3.32	3.46	88.5	92.3	70.0-130			4.13	25
Naphthalene	3.75	4.05	4.11	108	110	70.0-159			1.47	25
o-Xylene	3.75	3.70	3.79	98.7	101	70.0-130			2.40	25
Propene	3.75	3.29	3.35	87.7	89.3	64.0-144			1.81	25
Styrene	3.75	3.72	3.88	99.2	103	70.0-130			4.21	25
Tetrachloroethylene	3.75	3.70	3.76	98.7	100	70.0-130			1.61	25
Tetrahydrofuran	3.75	3.42	3.51	91.2	93.6	70.0-137			2.60	25
Toluene	3.75	3.69	3.72	98.4	99.2	70.0-130			0.810	25
trans-1,2-Dichloroethene	3.75	3.52	3.55	93.9	94.7	70.0-130			0.849	25
trans-1,3-Dichloropropene	3.75	3.60	3.64	96.0	97.1	70.0-130			1.10	25
Trichloroethylene	3.75	3.69	3.68	98.4	98.1	70.0-130			0.271	25
Trichlorofluoromethane	3.75	3.73	3.71	99.5	98.9	70.0-130			0.538	25
Vinyl acetate	3.75	3.37	3.45	89.9	92.0	70.0-130			2.35	25
Vinyl Bromide	3.75	3.96	3.98	106	106	70.0-130			0.504	25
Vinyl chloride	3.75	3.53	3.58	94.1	95.5	70.0-130			1.41	25
(S) 1,4-Bromofluorobenzene				97.8	98.8	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3737717-3 12/06/21 10:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	100			60.0-140

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

(LCS) R3737717-1 12/06/21 09:01 • (LCSD) R3737717-2 12/06/21 09:41

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	3.35	3.34	89.3	89.1	70.0-130			0.299	25
Heptane	3.75	2.92	2.91	77.9	77.6	70.0-130			0.343	25
TPH (GC/MS) Low Fraction	203	178	178	87.7	87.7	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				100	101	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

6

Sr

7

Qc

8

Gl

9

Al

10

Sc

Method Blank (MB)

(MB) R3738106-3 12/07/21 10:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	98.6			60.0-140

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

(LCS) R3738106-1 12/07/21 09:04 • (LCSD) R3738106-2 12/07/21 09:47

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	4.64	4.68	124	125	70.0-130			0.858	25
(S) 1,4-Bromofluorobenzene				99.0	98.6	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

QualifierDescription

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Ensolum, LLC

705 W. Wadley Ave, Ste 210
Midland, TX 79705

Billing Information:

Accounts Payable
2351 W Northwest Hwy. Ste.
1203
Dallas, TX 75220Pres
Chk

Report to:

Beaux Jennings

Email To: bjennings@ensolum.com

Project Description:

Levey Well

City/State

Collected: Hobbs, NM

Please Circle:

PT MT CT ET

Phone: 210-219-8858

Client Project

03B1417001

Lab Project

ENSOLUMMTX-SUMMA

Collected by (print):

Aaron Marquez

Site/Facility ID

03B1417001

P.O.

03B1417001

Collected by (signature):

[Signature]

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☒ Three Day

Quote

Date Results Needed

No.
of
Cntrs

Immediately

Packed on Ice N ☒ Y ☐

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No.
of
Cntrs

Levey Well

G

Air

-

12-1-21

1200

1

X

TO-15 Summa

Analysis / Container / Preservative

Chain of Custody

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # 1437069

Table # F141

Acctnum: ENSOLUMMTX

Template: T180734

Prelogin: P827709

PM: 134 - Mark W. Beasley

PB:

Shipped Via:

Remarks

Sample # (lab only)

-C1

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

pH Temp

Flow Other

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking # 9050 0894 4090

Sample Receipt Checklist

COC Seal Present/Intact: ☒ NP ☐ Y ☐ N
COC Signed/Accurate: ☒ ☐ N
Bottles arrive intact: ☒ ☐ N
Correct bottles used: ☒ ☐ N
Sufficient volume sent: ☒ ☐ N
If Applicable
VOA Zero Headspace: ☐ Y ☐ N
Preservation Correct/Checked: ☒ ☐ N
RAD Screen <0.5 mR/hr: ☒ ☐ N

Relinquished by: (Signature)

[Signature]

Date:

12-1-21

Time:

16:00

Received by: (Signature)

[Signature]

Trip Blank Received: Yes / No

HCL / MeOH
TBR

Relinquished by: (Signature)

[Signature]

Date:

12-1-21

Time:

17:30

Received by: (Signature)

[Signature]

Temp: °C Bottles Received:

AMB 1

If preservation required by Login: Date/Time

Relinquished by: (Signature)

[Signature]

Date:

12-2-21

Time:

12:21

Received for lab by: (Signature)

[Signature]

Date: Time:

12-2-21 12:21

Hold:

Condition:

NCF / OK



ANALYTICAL REPORT

December 13, 2021

Ensolum, LLC

Sample Delivery Group: L1439725
Samples Received: 12/08/2021
Project Number: 3B1417001
Description: Levey Well
Site: 3B1417001
Report To: Beaux Jennings
705 W. Wadley Ave, Ste 210
Midland, TX 79705

Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "M. Beasley".

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1439725-01	9	⁶ Sr
LEVEY WELL L1439725-02	11	
LEVEY WELL L1439725-03	13	⁷ Qc
LEVEY WELL L1439725-04	15	⁸ Gl
Qc: Quality Control Summary	17	
Volatile Organic Compounds (MS) by Method TO-15	17	⁹ Al
Gl: Glossary of Terms	33	
Al: Accreditations & Locations	34	¹⁰ Sc
Sc: Sample Chain of Custody	35	

LEVEY WELL L1439725-01 Air

Collected by
Aaron Marquez

Collected date/time
12/06/21 09:59

Received date/time
12/08/21 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1787864	200	12/11/21 21:34	12/11/21 21:34	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1788063	10000	12/12/21 14:31	12/12/21 14:31	FKG	Mt. Juliet, TN

¹Cp

²Tc

³Ss

LEVEY WELL L1439725-02 Air

Collected by
Aaron Marquez

Collected date/time
12/06/21 10:49

Received date/time
12/08/21 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1787401	100	12/10/21 19:39	12/10/21 19:39	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1787876	5000	12/11/21 20:58	12/11/21 20:58	FKG	Mt. Juliet, TN

⁴Cn

⁵Tr

⁶Sr

LEVEY WELL L1439725-03 Air

Collected by
Aaron Marquez

Collected date/time
12/06/21 11:55

Received date/time
12/08/21 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1787405	1	12/10/21 22:34	12/10/21 22:34	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1788063	50	12/12/21 22:46	12/12/21 22:46	FKG	Mt. Juliet, TN

⁷Qc

⁸Gl

⁹Al

LEVEY WELL L1439725-04 Air

Collected by
Aaron Marquez

Collected date/time
12/06/21 13:40

Received date/time
12/08/21 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1787405	1	12/10/21 23:17	12/10/21 23:17	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1788063	50	12/12/21 23:27	12/12/21 23:27	FKG	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1788410	500	12/13/21 14:39	12/13/21 14:39	MBF	Mt. Juliet, TN

¹⁰Sc

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



Mark W. Beasley
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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 12/13/2021 16:16					
Project Name: Levey Well		Laboratory Job Number: L1439725-01, 02, 03 and 04					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1787405, WG1787401, WG1787864, WG1787876, WG1788063 and WG1788410					
# 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: 12/13/2021 16:16					
Project Name: Levey Well		Laboratory Job Number: L1439725-01, 02, 03 and 04					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1787405, WG1787401, WG1787864, WG1787876, WG1788063 and WG1788410					
# 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: 12/13/2021 16:16	
Project Name: Levey Well		Laboratory Job Number: L1439725-01, 02, 03 and 04	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1787405, WG1787401, WG1787864, WG1787876, WG1788063 and WG1788410	
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: 12/06/21 09:59

L1439725

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	250	594	8310	19700		200	WG1787864
Allyl chloride	107-05-1	76.53	40.0	125	ND	ND		200	WG1787864
Benzene	71-43-2	78.10	40.0	128	ND	ND		200	WG1787864
Benzyl Chloride	100-44-7	127	40.0	208	ND	ND		200	WG1787864
Bromodichloromethane	75-27-4	164	40.0	268	ND	ND		200	WG1787864
Bromoform	75-25-2	253	120	1240	ND	ND		200	WG1787864
Bromomethane	74-83-9	94.90	40.0	155	ND	ND		200	WG1787864
1,3-Butadiene	106-99-0	54.10	400	885	ND	ND		200	WG1787864
Carbon disulfide	75-15-0	76.10	40.0	124	ND	ND		200	WG1787864
Carbon tetrachloride	56-23-5	154	40.0	252	ND	ND		200	WG1787864
Chlorobenzene	108-90-7	113	40.0	185	ND	ND		200	WG1787864
Chloroethane	75-00-3	64.50	40.0	106	ND	ND		200	WG1787864
Chloroform	67-66-3	119	40.0	195	ND	ND		200	WG1787864
Chloromethane	74-87-3	50.50	40.0	82.6	ND	ND		200	WG1787864
2-Chlorotoluene	95-49-8	126	40.0	206	ND	ND		200	WG1787864
Cyclohexane	110-82-7	84.20	2000	6890	95500	329000		10000	WG1788063
Dibromochloromethane	124-48-1	208	40.0	340	ND	ND		200	WG1787864
1,2-Dibromoethane	106-93-4	188	40.0	308	ND	ND		200	WG1787864
1,2-Dichlorobenzene	95-50-1	147	40.0	240	ND	ND		200	WG1787864
1,3-Dichlorobenzene	541-73-1	147	40.0	240	ND	ND		200	WG1787864
1,4-Dichlorobenzene	106-46-7	147	40.0	240	ND	ND		200	WG1787864
1,2-Dichloroethane	107-06-2	99	40.0	162	ND	ND		200	WG1787864
1,1-Dichloroethane	75-34-3	98	40.0	160	ND	ND		200	WG1787864
1,1-Dichloroethene	75-35-4	96.90	40.0	159	ND	ND		200	WG1787864
cis-1,2-Dichloroethene	156-59-2	96.90	40.0	159	ND	ND		200	WG1787864
trans-1,2-Dichloroethene	156-60-5	96.90	40.0	159	ND	ND		200	WG1787864
1,2-Dichloropropane	78-87-5	113	40.0	185	ND	ND		200	WG1787864
cis-1,3-Dichloropropene	10061-01-5	111	40.0	182	ND	ND		200	WG1787864
trans-1,3-Dichloropropene	10061-02-6	111	40.0	182	ND	ND		200	WG1787864
1,4-Dioxane	123-91-1	88.10	40.0	144	ND	ND		200	WG1787864
Ethanol	64-17-5	46.10	250	471	ND	ND		200	WG1787864
Ethylbenzene	100-41-4	106	40.0	173	ND	ND		200	WG1787864
4-Ethyltoluene	622-96-8	120	40.0	196	ND	ND		200	WG1787864
Trichlorofluoromethane	75-69-4	137.40	40.0	225	ND	ND		200	WG1787864
Dichlorodifluoromethane	75-71-8	120.92	40.0	198	ND	ND		200	WG1787864
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	40.0	307	ND	ND		200	WG1787864
1,2-Dichlorotetrafluoroethane	76-14-2	171	40.0	280	ND	ND		200	WG1787864
Heptane	142-82-5	100	2000	8180	107000	438000		10000	WG1788063
Hexachloro-1,3-butadiene	87-68-3	261	126	1350	ND	ND		200	WG1787864
n-Hexane	110-54-3	86.20	6300	22200	744000	2620000		10000	WG1788063
Isopropylbenzene	98-82-8	120.20	40.0	197	ND	ND		200	WG1787864
Methylene Chloride	75-09-2	84.90	40.0	139	ND	ND		200	WG1787864
Methyl Butyl Ketone	591-78-6	100	250	1020	ND	ND		200	WG1787864
2-Butanone (MEK)	78-93-3	72.10	250	737	4040	11900		200	WG1787864
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	250	1020	ND	ND		200	WG1787864
Methyl methacrylate	80-62-6	100.12	40.0	164	ND	ND		200	WG1787864
MTBE	1634-04-4	88.10	40.0	144	ND	ND		200	WG1787864
Naphthalene	91-20-3	128	126	660	ND	ND		200	WG1787864
2-Propanol	67-63-0	60.10	250	615	3960	9730		200	WG1787864
Propene	115-07-1	42.10	250	430	ND	ND		200	WG1787864
Styrene	100-42-5	104	40.0	170	ND	ND		200	WG1787864
1,1,2,2-Tetrachloroethane	79-34-5	168	40.0	275	ND	ND		200	WG1787864
Tetrachloroethylene	127-18-4	166	40.0	272	ND	ND		200	WG1787864
Tetrahydrofuran	109-99-9	72.10	40.0	118	ND	ND		200	WG1787864
Toluene	108-88-3	92.10	100	377	ND	ND		200	WG1787864
1,2,4-Trichlorobenzene	120-82-1	181	126	933	ND	ND		200	WG1787864

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/06/21 09:59

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	40.0	218	ND	ND		200	WG1787864
1,1,2-Trichloroethane	79-00-5	133	40.0	218	ND	ND		200	WG1787864
Trichloroethylene	79-01-6	131	40.0	214	ND	ND		200	WG1787864
1,2,4-Trimethylbenzene	95-63-6	120	40.0	196	ND	ND		200	WG1787864
1,3,5-Trimethylbenzene	108-67-8	120	40.0	196	ND	ND		200	WG1787864
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	ND	ND		200	WG1787864
Vinyl chloride	75-01-4	62.50	40.0	102	ND	ND		200	WG1787864
Vinyl Bromide	593-60-2	106.95	40.0	175	ND	ND		200	WG1787864
Vinyl acetate	108-05-4	86.10	40.0	141	ND	ND		200	WG1787864
m&p-Xylene	1330-20-7	106	80.0	347	ND	ND		200	WG1787864
o-Xylene	95-47-6	106	40.0	173	ND	ND		200	WG1787864
TPH (GC/MS) Low Fraction	8006-61-9	101	2000000	8260000	3200000	13200000		10000	WG1788063
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1787864
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.9				WG1788063

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Collected date/time: 12/06/21 10:49

L1439725

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	4660	11100		100	WG1787401
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1787401
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1787401
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1787401
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1787401
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1787401
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1787401
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1787401
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1787401
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1787401
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1787401
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1787401
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1787401
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1787401
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1787401
Cyclohexane	110-82-7	84.20	1000	3440	35700	123000		5000	WG1787876
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1787401
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1787401
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1787401
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1787401
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1787401
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1787401
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1787401
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1787401
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1787401
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1787401
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1787401
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1787401
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1787401
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1787401
Ethanol	64-17-5	46.10	125	236	ND	ND		100	WG1787401
Ethylbenzene	100-41-4	106	20.0	86.7	ND	ND		100	WG1787401
4-Ethyltoluene	622-96-8	120	20.0	98.2	32.5	160		100	WG1787401
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1787401
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1787401
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1787401
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1787401
Heptane	142-82-5	100	1000	4090	42300	173000		5000	WG1787876
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1787401
n-Hexane	110-54-3	86.20	3150	11100	249000	878000		5000	WG1787876
Isopropylbenzene	98-82-8	120.20	20.0	98.3	ND	ND		100	WG1787401
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1787401
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1787401
2-Butanone (MEK)	78-93-3	72.10	125	369	2350	6930		100	WG1787401
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1787401
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1787401
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1787401
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1787401
2-Propanol	67-63-0	60.10	125	307	2510	6170		100	WG1787401
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1787401
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1787401
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1787401
Tetrachloroethylene	127-18-4	166	20.0	136	ND	ND		100	WG1787401
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1787401
Toluene	108-88-3	92.10	50.0	188	ND	ND		100	WG1787401
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1787401

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/06/21 10:49

L1439725

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	WG1787401
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1787401
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG1787401
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	46.2	227		100	WG1787401
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	43.4	213		100	WG1787401
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1787401
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1787401
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1787401
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1787401
m&p-Xylene	1330-20-7	106	40.0	173	46.2	200		100	WG1787401
o-Xylene	95-47-6	106	20.0	86.7	20.7	89.7		100	WG1787401
TPH (GC/MS) Low Fraction	8006-61-9	101	1000000	4130000	1210000	5000000		5000	WG1787876
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1787401
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.7				WG1787876

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Collected date/time: 12/06/21 11:55

L1439725

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	62.5	149	551	1310		50	WG1788063
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1787405
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1787405
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1787405
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1787405
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1787405
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1787405
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1787405
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1787405
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1787405
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1787405
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1787405
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1787405
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1787405
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1787405
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1787405
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1787405
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1787405
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1787405
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1787405
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1787405
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1787405
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1787405
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1787405
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1787405
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1787405
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1787405
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1787405
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1787405
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1787405
Ethanol	64-17-5	46.10	1.25	2.36	21.6	40.7		1	WG1787405
Ethylbenzene	100-41-4	106	0.200	0.867	2.59	11.2		1	WG1787405
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1787405
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1787405
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.287	1.42		1	WG1787405
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1787405
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1787405
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1787405
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1787405
n-Hexane	110-54-3	86.20	31.5	111	4410	15500		50	WG1788063
Isopropylbenzene	98-82-8	120.20	0.200	0.983	2.14	10.5		1	WG1787405
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1787405
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1787405
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1787405
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1787405
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1787405
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1787405
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1787405
2-Propanol	67-63-0	60.10	62.5	154	2660	6540		50	WG1788063
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1787405
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1787405
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1787405
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1787405
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1787405
Toluene	108-88-3	92.10	0.500	1.88	5.72	21.5		1	WG1787405
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1787405

1

Cp

2

Tc

3

Ss

4

Cn

5

Tr

6

Sr

7

Qc

8

Gl

9

Al

10

Sc

Collected date/time: 12/06/21 11:55

L1439725

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	WG1787405
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1787405
Trichloroethylene	79-01-6	131	0.200	1.07	0.220	1.18		1	WG1787405
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1787405
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1787405
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1787405
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1787405
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1787405
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1787405
m&p-Xylene	1330-20-7	106	0.400	1.73	10.3	44.7		1	WG1787405
o-Xylene	95-47-6	106	0.200	0.867	6.76	29.3		1	WG1787405
TPH (GC/MS) Low Fraction	8006-61-9	101	10000	41300	41700	172000		50	WG1788063
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1787405
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.3				WG1788063

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Collected date/time: 12/06/21 13:40

L1439725

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	62.5	149	2330	5540		50	WG1788063
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1787405
Benzene	71-43-2	78.10	10.0	31.9	395	1260		50	WG1788063
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1787405
Bromodichloromethane	75-27-4	164	10.0	67.1	ND	ND		50	WG1788063
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1787405
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1787405
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1787405
Carbon disulfide	75-15-0	76.10	0.200	0.622	6.88	21.4		1	WG1787405
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1787405
Chlorobenzene	108-90-7	113	10.0	46.2	ND	ND		50	WG1788063
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1787405
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1787405
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1787405
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1787405
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1787405
Dibromochloromethane	124-48-1	208	10.0	85.1	ND	ND		50	WG1788063
1,2-Dibromoethane	106-93-4	188	10.0	76.9	ND	ND		50	WG1788063
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1787405
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1787405
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1787405
1,2-Dichloroethane	107-06-2	99	10.0	40.5	ND	ND		50	WG1788063
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1787405
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1787405
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1787405
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1787405
1,2-Dichloropropane	78-87-5	113	10.0	46.2	ND	ND		50	WG1788063
cis-1,3-Dichloropropene	10061-01-5	111	10.0	45.4	ND	ND		50	WG1788063
trans-1,3-Dichloropropene	10061-02-6	111	10.0	45.4	ND	ND		50	WG1788063
1,4-Dioxane	123-91-1	88.10	10.0	36.0	ND	ND		50	WG1788063
Ethanol	64-17-5	46.10	1.25	2.36	ND	ND		1	WG1787405
Ethylbenzene	100-41-4	106	10.0	43.4	270	1170		50	WG1788063
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1787405
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1787405
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1787405
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1787405
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1787405
Heptane	142-82-5	100	10.0	40.9	4230	17300		50	WG1788063
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1787405
n-Hexane	110-54-3	86.20	315	1110	22100	77900		500	WG1788410
Isopropylbenzene	98-82-8	120.20	0.200	0.983	4.67	23.0		1	WG1787405
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1787405
Methyl Butyl Ketone	591-78-6	100	62.5	256	ND	ND		50	WG1788063
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1787405
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	62.5	256	ND	ND		50	WG1788063
Methyl methacrylate	80-62-6	100.12	10.0	40.9	ND	ND		50	WG1788063
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1787405
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1787405
2-Propanol	67-63-0	60.10	62.5	154	1880	4620		50	WG1788063
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1787405
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1787405
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1787405
Tetrachloroethylene	127-18-4	166	10.0	67.9	ND	ND		50	WG1788063
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1787405
Toluene	108-88-3	92.10	25.0	94.2	789	2970		50	WG1788063
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1787405

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/06/21 13:40

L1439725

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	WG1787405
1,1,2-Trichloroethane	79-00-5	133	10.0	54.4	ND	ND		50	WG1788063
Trichloroethylene	79-01-6	131	10.0	53.6	ND	ND		50	WG1788063
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1787405
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1787405
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1787405
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1787405
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1787405
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1787405
m&p-Xylene	1330-20-7	106	0.400	1.73	139	603		1	WG1787405
o-Xylene	95-47-6	106	0.200	0.867	72.1	313		1	WG1787405
TPH (GC/MS) Low Fraction	8006-61-9	101	10000	41300	94800	392000		50	WG1788063
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		78.9				WG1787405
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.1				WG1788063
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.4				WG1788410

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3739470-3 12/10/21 10:14

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	0.0606	U	0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1439725-02

Method Blank (MB)

(MB) R3739470-3 12/10/21 10:14

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.199	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
Ethanol	U		0.265	1.25
(S) 1,4-Bromofluorobenzene	97.3			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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

(LCS) R3739470-1 12/10/21 08:51 • (LCSD) R3739470-2 12/10/21 09:33

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.09	4.08	109	109	55.0-148			0.245	25
Propene	3.75	4.28	4.31	114	115	64.0-144			0.698	25
Dichlorodifluoromethane	3.75	4.05	4.11	108	110	64.0-139			1.47	25
1,2-Dichlorotetrafluoroethane	3.75	4.32	4.38	115	117	70.0-130			1.38	25
Chloromethane	3.75	4.10	4.24	109	113	70.0-130			3.36	25
Vinyl chloride	3.75	4.16	4.20	111	112	70.0-130			0.957	25
1,3-Butadiene	3.75	4.31	4.34	115	116	70.0-130			0.694	25
Bromomethane	3.75	4.17	4.18	111	111	70.0-130			0.240	25

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

(LCS) R3739470-1 12/10/21 08:51 • (LCSD) R3739470-2 12/10/21 09:33

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 %
Chloroethane	3.75	4.26	4.20	114	112	70.0-130			1.42	25
Trichlorofluoromethane	3.75	4.15	4.19	111	112	70.0-130			0.959	25
1,1,2-Trichlorotrifluoroethane	3.75	4.17	4.29	111	114	70.0-130			2.84	25
1,1-Dichloroethene	3.75	4.13	4.20	110	112	70.0-130			1.68	25
1,1-Dichloroethane	3.75	4.26	4.32	114	115	70.0-130			1.40	25
Acetone	3.75	4.31	4.32	115	115	70.0-130			0.232	25
2-Propanol	3.75	4.13	4.09	110	109	70.0-139			0.973	25
Carbon disulfide	3.75	4.06	4.60	108	123	70.0-130			12.5	25
Methylene Chloride	3.75	4.05	4.15	108	111	70.0-130			2.44	25
MTBE	3.75	4.25	4.31	113	115	70.0-130			1.40	25
trans-1,2-Dichloroethene	3.75	4.14	4.26	110	114	70.0-130			2.86	25
Vinyl acetate	3.75	4.25	4.32	113	115	70.0-130			1.63	25
Methyl Ethyl Ketone	3.75	4.34	4.27	116	114	70.0-130			1.63	25
cis-1,2-Dichloroethene	3.75	4.27	4.32	114	115	70.0-130			1.16	25
Chloroform	3.75	4.33	4.42	115	118	70.0-130			2.06	25
1,1,1-Trichloroethane	3.75	4.39	4.42	117	118	70.0-130			0.681	25
Carbon tetrachloride	3.75	4.39	4.39	117	117	70.0-130			0.000	25
Benzene	3.75	4.26	4.34	114	116	70.0-130			1.86	25
1,2-Dichloroethane	3.75	4.49	4.59	120	122	70.0-130			2.20	25
Trichloroethylene	3.75	4.31	4.41	115	118	70.0-130			2.29	25
1,2-Dichloropropane	3.75	4.13	4.28	110	114	70.0-130			3.57	25
1,4-Dioxane	3.75	4.23	4.41	113	118	70.0-140			4.17	25
Bromodichloromethane	3.75	4.41	4.46	118	119	70.0-130			1.13	25
cis-1,3-Dichloropropene	3.75	4.43	4.44	118	118	70.0-130			0.225	25
4-Methyl-2-pentanone (MIBK)	3.75	4.42	4.52	118	121	70.0-139			2.24	25
Toluene	3.75	4.39	4.36	117	116	70.0-130			0.686	25
trans-1,3-Dichloropropene	3.75	4.52	4.51	121	120	70.0-130			0.221	25
1,1,2-Trichloroethane	3.75	4.40	4.37	117	117	70.0-130			0.684	25
Tetrachloroethylene	3.75	4.42	4.45	118	119	70.0-130			0.676	25
Methyl Butyl Ketone	3.75	4.48	4.53	119	121	70.0-149			1.11	25
Dibromochloromethane	3.75	4.40	4.43	117	118	70.0-130			0.679	25
1,2-Dibromoethane	3.75	4.39	4.47	117	119	70.0-130			1.81	25
Chlorobenzene	3.75	4.31	4.41	115	118	70.0-130			2.29	25
Ethylbenzene	3.75	4.33	4.36	115	116	70.0-130			0.690	25
m&p-Xylene	7.50	8.72	8.89	116	119	70.0-130			1.93	25
o-Xylene	3.75	4.31	4.36	115	116	70.0-130			1.15	25
Styrene	3.75	4.38	4.45	117	119	70.0-130			1.59	25
Bromoform	3.75	4.37	4.41	117	118	70.0-130			0.911	25
1,1,2,2-Tetrachloroethane	3.75	4.28	4.43	114	118	70.0-130			3.44	25
4-Ethyltoluene	3.75	4.35	4.50	116	120	70.0-130			3.39	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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

(LCS) R3739470-1 12/10/21 08:51 • (LCSD) R3739470-2 12/10/21 09:33

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,3,5-Trimethylbenzene	3.75	4.39	4.47	117	119	70.0-130			1.81	25
1,2,4-Trimethylbenzene	3.75	4.37	4.57	117	122	70.0-130			4.47	25
1,3-Dichlorobenzene	3.75	4.31	4.46	115	119	70.0-130			3.42	25
1,4-Dichlorobenzene	3.75	4.29	4.45	114	119	70.0-130			3.66	25
Benzyl Chloride	3.75	4.47	4.65	119	124	70.0-152			3.95	25
1,2-Dichlorobenzene	3.75	4.25	4.45	113	119	70.0-130			4.60	25
1,2,4-Trichlorobenzene	3.75	4.35	4.50	116	120	70.0-160			3.39	25
Hexachloro-1,3-butadiene	3.75	4.43	4.56	118	122	70.0-151			2.89	25
Naphthalene	3.75	4.42	4.51	118	120	70.0-159			2.02	25
Allyl Chloride	3.75	3.63	4.31	96.8	115	70.0-130			17.1	25
2-Chlorotoluene	3.75	4.35	4.50	116	120	70.0-130			3.39	25
Methyl Methacrylate	3.75	4.42	4.46	118	119	70.0-130			0.901	25
Tetrahydrofuran	3.75	4.27	4.27	114	114	70.0-137			0.000	25
2,2,4-Trimethylpentane	3.75	4.27	4.34	114	116	70.0-130			1.63	25
Vinyl Bromide	3.75	4.06	4.08	108	109	70.0-130			0.491	25
Isopropylbenzene	3.75	4.14	4.29	110	114	70.0-130			3.56	25
(S) 1,4-Bromofluorobenzene				99.3	100	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3739465-3 12/10/21 10:16

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	0.0616	U	0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	0.0567	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
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
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1439725-03,04

Method Blank (MB)

(MB) R3739465-3 12/10/21 10:16

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
Propene	0.159	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
Ethanol	U		0.265	1.25
(S) 1,4-Bromofluorobenzene	99.9			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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

(LCS) R3739465-1 12/10/21 08:51 • (LCSD) R3739465-2 12/10/21 09:34

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.12	3.60	110	96.0	55.0-148			13.5	25
Propene	3.75	4.02	3.81	107	102	64.0-144			5.36	25
Dichlorodifluoromethane	3.75	4.02	3.85	107	103	64.0-139			4.32	25
1,2-Dichlorotetrafluoroethane	3.75	4.01	3.77	107	101	70.0-130			6.17	25
Chloromethane	3.75	3.95	3.78	105	101	70.0-130			4.40	25
Vinyl chloride	3.75	4.09	3.64	109	97.1	70.0-130			11.6	25
1,3-Butadiene	3.75	4.04	3.41	108	90.9	70.0-130			16.9	25
Bromomethane	3.75	4.05	3.26	108	86.9	70.0-130			21.6	25

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

(LCS) R3739465-1 12/10/21 08:51 • (LCSD) R3739465-2 12/10/21 09:34

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 %
Chloroethane	3.75	4.09	3.30	109	88.0	70.0-130			21.4	25
Trichlorofluoromethane	3.75	4.14	3.48	110	92.8	70.0-130			17.3	25
1,1,2-Trichlorotrifluoroethane	3.75	3.93	3.77	105	101	70.0-130			4.16	25
1,1-Dichloroethene	3.75	4.04	3.81	108	102	70.0-130			5.86	25
1,1-Dichloroethane	3.75	4.01	3.78	107	101	70.0-130			5.91	25
Carbon disulfide	3.75	3.80	3.63	101	96.8	70.0-130			4.58	25
Methylene Chloride	3.75	3.82	3.56	102	94.9	70.0-130			7.05	25
MTBE	3.75	3.97	3.88	106	103	70.0-130			2.29	25
trans-1,2-Dichloroethene	3.75	4.01	3.82	107	102	70.0-130			4.85	25
Vinyl acetate	3.75	3.47	3.49	92.5	93.1	70.0-130			0.575	25
Methyl Ethyl Ketone	3.75	3.93	3.75	105	100	70.0-130			4.69	25
cis-1,2-Dichloroethene	3.75	3.94	3.83	105	102	70.0-130			2.83	25
Chloroform	3.75	3.87	3.77	103	101	70.0-130			2.62	25
Cyclohexane	3.75	3.93	3.88	105	103	70.0-130			1.28	25
1,1,1-Trichloroethane	3.75	3.87	3.80	103	101	70.0-130			1.83	25
Carbon tetrachloride	3.75	3.94	3.90	105	104	70.0-130			1.02	25
Benzene	3.75	3.93	3.81	105	102	70.0-130			3.10	25
1,2-Dichloroethane	3.75	3.94	3.87	105	103	70.0-130			1.79	25
Heptane	3.75	3.86	3.73	103	99.5	70.0-130			3.43	25
Trichloroethylene	3.75	3.79	3.83	101	102	70.0-130			1.05	25
1,2-Dichloropropane	3.75	3.89	3.77	104	101	70.0-130			3.13	25
1,4-Dioxane	3.75	3.80	3.70	101	98.7	70.0-140			2.67	25
Bromodichloromethane	3.75	3.82	3.77	102	101	70.0-130			1.32	25
cis-1,3-Dichloropropene	3.75	3.91	3.86	104	103	70.0-130			1.29	25
4-Methyl-2-pentanone (MIBK)	3.75	3.93	3.75	105	100	70.0-139			4.69	25
Toluene	3.75	3.93	3.93	105	105	70.0-130			0.000	25
trans-1,3-Dichloropropene	3.75	3.88	3.82	103	102	70.0-130			1.56	25
1,1,2-Trichloroethane	3.75	3.86	3.88	103	103	70.0-130			0.517	25
Tetrachloroethylene	3.75	3.71	3.75	98.9	100	70.0-130			1.07	25
Methyl Butyl Ketone	3.75	4.02	3.91	107	104	70.0-149			2.77	25
Dibromochloromethane	3.75	3.77	3.80	101	101	70.0-130			0.793	25
1,2-Dibromoethane	3.75	3.80	3.86	101	103	70.0-130			1.57	25
Chlorobenzene	3.75	3.93	3.82	105	102	70.0-130			2.84	25
Ethylbenzene	3.75	3.98	3.92	106	105	70.0-130			1.52	25
m&p-Xylene	7.50	8.20	8.00	109	107	70.0-130			2.47	25
o-Xylene	3.75	4.04	4.01	108	107	70.0-130			0.745	25
Styrene	3.75	4.15	4.06	111	108	70.0-130			2.19	25
Bromoform	3.75	3.79	3.86	101	103	70.0-130			1.83	25
1,1,2,2-Tetrachloroethane	3.75	4.01	3.90	107	104	70.0-130			2.78	25
4-Ethyltoluene	3.75	4.19	4.11	112	110	70.0-130			1.93	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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

(LCS) R3739465-1 12/10/21 08:51 • (LCSD) R3739465-2 12/10/21 09:34

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,3,5-Trimethylbenzene	3.75	4.09	4.15	109	111	70.0-130			1.46	25
1,2,4-Trimethylbenzene	3.75	4.20	4.12	112	110	70.0-130			1.92	25
1,3-Dichlorobenzene	3.75	4.23	4.17	113	111	70.0-130			1.43	25
1,4-Dichlorobenzene	3.75	4.39	4.30	117	115	70.0-130			2.07	25
Benzyl Chloride	3.75	4.41	4.36	118	116	70.0-152			1.14	25
1,2-Dichlorobenzene	3.75	4.31	4.24	115	113	70.0-130			1.64	25
1,2,4-Trichlorobenzene	3.75	4.30	4.15	115	111	70.0-160			3.55	25
Hexachloro-1,3-butadiene	3.75	4.20	4.02	112	107	70.0-151			4.38	25
Naphthalene	3.75	4.39	4.32	117	115	70.0-159			1.61	25
Allyl Chloride	3.75	3.94	3.84	105	102	70.0-130			2.57	25
2-Chlorotoluene	3.75	4.10	4.08	109	109	70.0-130			0.489	25
Methyl Methacrylate	3.75	3.78	3.69	101	98.4	70.0-130			2.41	25
Tetrahydrofuran	3.75	3.87	3.70	103	98.7	70.0-137			4.49	25
2,2,4-Trimethylpentane	3.75	4.02	3.85	107	103	70.0-130			4.32	25
Vinyl Bromide	3.75	4.20	3.46	112	92.3	70.0-130			19.3	25
Isopropylbenzene	3.75	4.15	4.07	111	109	70.0-130			1.95	25
(S) 1,4-Bromofluorobenzene				101	101	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3739693-3 12/11/21 11:49

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	0.0624	U	0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1439725-01

Method Blank (MB)

(MB) R3739693-3 12/11/21 11:49

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.222	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
Ethanol	U		0.265	1.25
(S) 1,4-Bromofluorobenzene	98.1			60.0-140

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

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

(LCS) R3739693-1 12/11/21 10:27 • (LCSD) R3739693-2 12/11/21 11:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.36	4.44	116	118	55.0-148			1.82	25
Propene	3.75	4.55	4.48	121	119	64.0-144			1.55	25
Dichlorodifluoromethane	3.75	4.31	4.41	115	118	64.0-139			2.29	25
1,2-Dichlorotetrafluoroethane	3.75	4.57	4.61	122	123	70.0-130			0.871	25
Chloromethane	3.75	4.45	4.39	119	117	70.0-130			1.36	25
Vinyl chloride	3.75	4.37	4.41	117	118	70.0-130			0.911	25
1,3-Butadiene	3.75	4.46	4.59	119	122	70.0-130			2.87	25
Bromomethane	3.75	4.45	4.33	119	115	70.0-130			2.73	25

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

(LCS) R3739693-1 12/11/21 10:27 • (LCSD) R3739693-2 12/11/21 11:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloroethane	3.75	4.42	4.52	118	121	70.0-130			2.24	25
Trichlorofluoromethane	3.75	4.45	4.42	119	118	70.0-130			0.676	25
1,1,2-Trichlorotrifluoroethane	3.75	4.43	4.52	118	121	70.0-130			2.01	25
1,1-Dichloroethene	3.75	4.52	4.44	121	118	70.0-130			1.79	25
1,1-Dichloroethane	3.75	4.52	4.53	121	121	70.0-130			0.221	25
Acetone	3.75	4.63	4.60	123	123	70.0-130			0.650	25
2-Propanol	3.75	4.35	4.36	116	116	70.0-139			0.230	25
Carbon disulfide	3.75	4.79	4.33	128	115	70.0-130			10.1	25
Methylene Chloride	3.75	4.43	4.40	118	117	70.0-130			0.679	25
MTBE	3.75	4.50	4.57	120	122	70.0-130			1.54	25
trans-1,2-Dichloroethene	3.75	4.48	4.50	119	120	70.0-130			0.445	25
Vinyl acetate	3.75	4.45	4.55	119	121	70.0-130			2.22	25
Methyl Ethyl Ketone	3.75	4.48	4.45	119	119	70.0-130			0.672	25
cis-1,2-Dichloroethene	3.75	4.53	4.50	121	120	70.0-130			0.664	25
Chloroform	3.75	4.59	4.60	122	123	70.0-130			0.218	25
1,1,1-Trichloroethane	3.75	4.61	4.61	123	123	70.0-130			0.000	25
Carbon tetrachloride	3.75	4.58	4.62	122	123	70.0-130			0.870	25
Benzene	3.75	4.54	4.53	121	121	70.0-130			0.221	25
1,2-Dichloroethane	3.75	4.81	4.78	128	127	70.0-130			0.626	25
Trichloroethylene	3.75	4.56	4.51	122	120	70.0-130			1.10	25
1,2-Dichloropropane	3.75	4.43	4.33	118	115	70.0-130			2.28	25
1,4-Dioxane	3.75	4.48	4.52	119	121	70.0-140			0.889	25
Bromodichloromethane	3.75	4.69	4.68	125	125	70.0-130			0.213	25
cis-1,3-Dichloropropene	3.75	4.66	4.66	124	124	70.0-130			0.000	25
4-Methyl-2-pentanone (MIBK)	3.75	4.67	4.70	125	125	70.0-139			0.640	25
Toluene	3.75	4.55	4.58	121	122	70.0-130			0.657	25
trans-1,3-Dichloropropene	3.75	4.75	4.72	127	126	70.0-130			0.634	25
1,1,2-Trichloroethane	3.75	4.62	4.61	123	123	70.0-130			0.217	25
Tetrachloroethylene	3.75	4.64	4.59	124	122	70.0-130			1.08	25
Methyl Butyl Ketone	3.75	4.76	4.63	127	123	70.0-149			2.77	25
Dibromochloromethane	3.75	4.63	4.59	123	122	70.0-130			0.868	25
1,2-Dibromoethane	3.75	4.65	4.63	124	123	70.0-130			0.431	25
Chlorobenzene	3.75	4.55	4.57	121	122	70.0-130			0.439	25
Ethylbenzene	3.75	4.48	4.51	119	120	70.0-130			0.667	25
m&p-Xylene	7.50	9.09	9.09	121	121	70.0-130			0.000	25
o-Xylene	3.75	4.48	4.56	119	122	70.0-130			1.77	25
Styrene	3.75	4.69	4.63	125	123	70.0-130			1.29	25
Bromoform	3.75	4.63	4.57	123	122	70.0-130			1.30	25
1,1,2,2-Tetrachloroethane	3.75	4.54	4.54	121	121	70.0-130			0.000	25
4-Ethyltoluene	3.75	4.61	4.58	123	122	70.0-130			0.653	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1439725-01

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

(LCS) R3739693-1 12/11/21 10:27 • (LCSD) R3739693-2 12/11/21 11:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,3,5-Trimethylbenzene	3.75	4.66	4.71	124	126	70.0-130			1.07	25
1,2,4-Trimethylbenzene	3.75	4.64	4.69	124	125	70.0-130			1.07	25
1,3-Dichlorobenzene	3.75	4.71	4.68	126	125	70.0-130			0.639	25
1,4-Dichlorobenzene	3.75	4.56	4.64	122	124	70.0-130			1.74	25
Benzyl Chloride	3.75	4.79	4.75	128	127	70.0-152			0.839	25
1,2-Dichlorobenzene	3.75	4.58	4.59	122	122	70.0-130			0.218	25
1,2,4-Trichlorobenzene	3.75	4.63	4.62	123	123	70.0-160			0.216	25
Hexachloro-1,3-butadiene	3.75	4.72	4.69	126	125	70.0-151			0.638	25
Naphthalene	3.75	4.65	4.65	124	124	70.0-159			0.000	25
Allyl Chloride	3.75	4.10	4.40	109	117	70.0-130			7.06	25
2-Chlorotoluene	3.75	4.61	4.65	123	124	70.0-130			0.864	25
Methyl Methacrylate	3.75	4.49	4.71	120	126	70.0-130			4.78	25
Tetrahydrofuran	3.75	4.47	4.50	119	120	70.0-137			0.669	25
2,2,4-Trimethylpentane	3.75	4.50	4.55	120	121	70.0-130			1.10	25
Vinyl Bromide	3.75	4.40	4.36	117	116	70.0-130			0.913	25
Isopropylbenzene	3.75	4.46	4.45	119	119	70.0-130			0.224	25
(S) 1,4-Bromofluorobenzene				99.5	99.5	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3739755-3 12/11/21 11:06

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	92.0			60.0-140

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

(LCS) R3739755-1 12/11/21 09:41 • (LCSD) R3739755-2 12/11/21 10:24

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	3.28	3.25	87.5	86.7	70.0-130			0.919	25
Cyclohexane	3.75	3.60	3.63	96.0	96.8	70.0-130			0.830	25
Heptane	3.75	3.14	3.14	83.7	83.7	70.0-130			0.000	25
TPH (GC/MS) Low Fraction	203	210	204	103	100	70.0-130			2.90	25
(S) 1,4-Bromofluorobenzene				95.3	94.5	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1439725-01.03.04

Method Blank (MB)

(MB) R3739757-3 12/12/21 10:31

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Benzene	U		0.0715	0.200
Bromodichloromethane	U		0.0702	0.200
Chlorobenzene	U		0.0832	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	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
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
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
2-Propanol	U		0.264	1.25
Tetrachloroethylene	U		0.0814	0.200
Toluene	U		0.0870	0.500
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	91.1			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) R3739757-1 12/12/21 09:06 • (LCSD) R3739757-2 12/12/21 09:49

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	3.19	3.24	85.1	86.4	70.0-130			1.56	25
2-Propanol	3.75	3.11	3.15	82.9	84.0	70.0-139			1.28	25
n-Hexane	3.75	3.26	3.34	86.9	89.1	70.0-130			2.42	25
Cyclohexane	3.75	3.65	3.71	97.3	98.9	70.0-130			1.63	25
Benzene	3.75	3.46	3.51	92.3	93.6	70.0-130			1.43	25
1,2-Dichloroethane	3.75	3.84	3.91	102	104	70.0-130			1.81	25
Heptane	3.75	3.13	3.13	83.5	83.5	70.0-130			0.000	25
Trichloroethylene	3.75	3.91	4.03	104	107	70.0-130			3.02	25

Volatile Organic Compounds (MS) by Method TO-15

L1439725-01,03,04

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

(LCS) R3739757-1 12/12/21 09:06 • (LCSD) R3739757-2 12/12/21 09:49

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,2-Dichloropropane	3.75	3.23	3.30	86.1	88.0	70.0-130			2.14	25
1,4-Dioxane	3.75	3.73	3.80	99.5	101	70.0-140			1.86	25
Bromodichloromethane	3.75	3.82	3.97	102	106	70.0-130			3.85	25
cis-1,3-Dichloropropene	3.75	3.79	3.81	101	102	70.0-130			0.526	25
4-Methyl-2-pentanone (MIBK)	3.75	3.18	3.22	84.8	85.9	70.0-139			1.25	25
Toluene	3.75	3.83	3.85	102	103	70.0-130			0.521	25
trans-1,3-Dichloropropene	3.75	3.77	3.84	101	102	70.0-130			1.84	25
1,1,2-Trichloroethane	3.75	3.78	3.90	101	104	70.0-130			3.13	25
Tetrachloroethylene	3.75	4.76	4.81	127	128	70.0-130			1.04	25
Methyl Butyl Ketone	3.75	3.29	3.37	87.7	89.9	70.0-149			2.40	25
Dibromochloromethane	3.75	4.34	4.39	116	117	70.0-130			1.15	25
1,2-Dibromoethane	3.75	3.92	3.97	105	106	70.0-130			1.27	25
Chlorobenzene	3.75	3.82	3.95	102	105	70.0-130			3.35	25
Ethylbenzene	3.75	3.96	4.08	106	109	70.0-130			2.99	25
TPH (GC/MS) Low Fraction	203	217	218	107	107	70.0-130			0.460	25
Methyl Methacrylate	3.75	3.15	3.24	84.0	86.4	70.0-130			2.82	25
(S) 1,4-Bromofluorobenzene				94.4	94.3	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1439725-04](#)

Method Blank (MB)

(MB) R3740120-3 12/13/21 09:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	91.3			60.0-140

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

(LCS) R3740120-1 12/13/21 08:40 • (LCSD) R3740120-2 12/13/21 09:11

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	3.44	3.44	91.7	91.7	70.0-130			0.000	25
(S) 1,4-Bromofluorobenzene				96.4	94.7	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.

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

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Company Name/Address: Ensolum, LLC 705 W. Wadley Ave, Ste ²⁴⁰ ~~210~~ Midland, TX 79705				Billing Information: Accounts Payable 2351 W Northwest Hwy. Ste. 1203 Dallas, TX 75220				Pres Chk		Analysis / Container / Preservative										Chain of Custody Page 1 of 1	
Report to: Beaux Jennings				Email To: bjennings@ensolum.com																 12065 Lebanon Road Mt Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf	
Project Description: Levey Well				City/State Collected: Hobbs, NM		Please Circle: PT MT CT ET														SDG # L/439725 Td L-236	
Phone: 210-219-8858		Client Project # 03B1417001		Lab Project # ENSOLUMTX-SUMMA																	
Collected by (print): Aaron Marquez		Site/Facility ID # 03B1417001		P.O. # 03B1417001																	
Collected by (signature):		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☒ Three Day		Quote #		Date Results Needed															
Immediately Packed on Ice N X Y								No. of Cntrs													
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time															
Levey Well		G	Air	-	12/06/21	0959	1	X												01	
Levey Well		G	Air	-	12/06/21	1049	1	X												02	
Levey Well		G	Air	-	12/06/21	1155	1	X												03	
Levey Well		G	Air	-	12/06/21	1340	1	X												04	



ANALYTICAL REPORT

December 17, 2021

Ensolum, LLC

Sample Delivery Group: L1441293
Samples Received: 12/11/2021
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
705 W. Wadley Ave, Ste 210
Midland, TX 79705

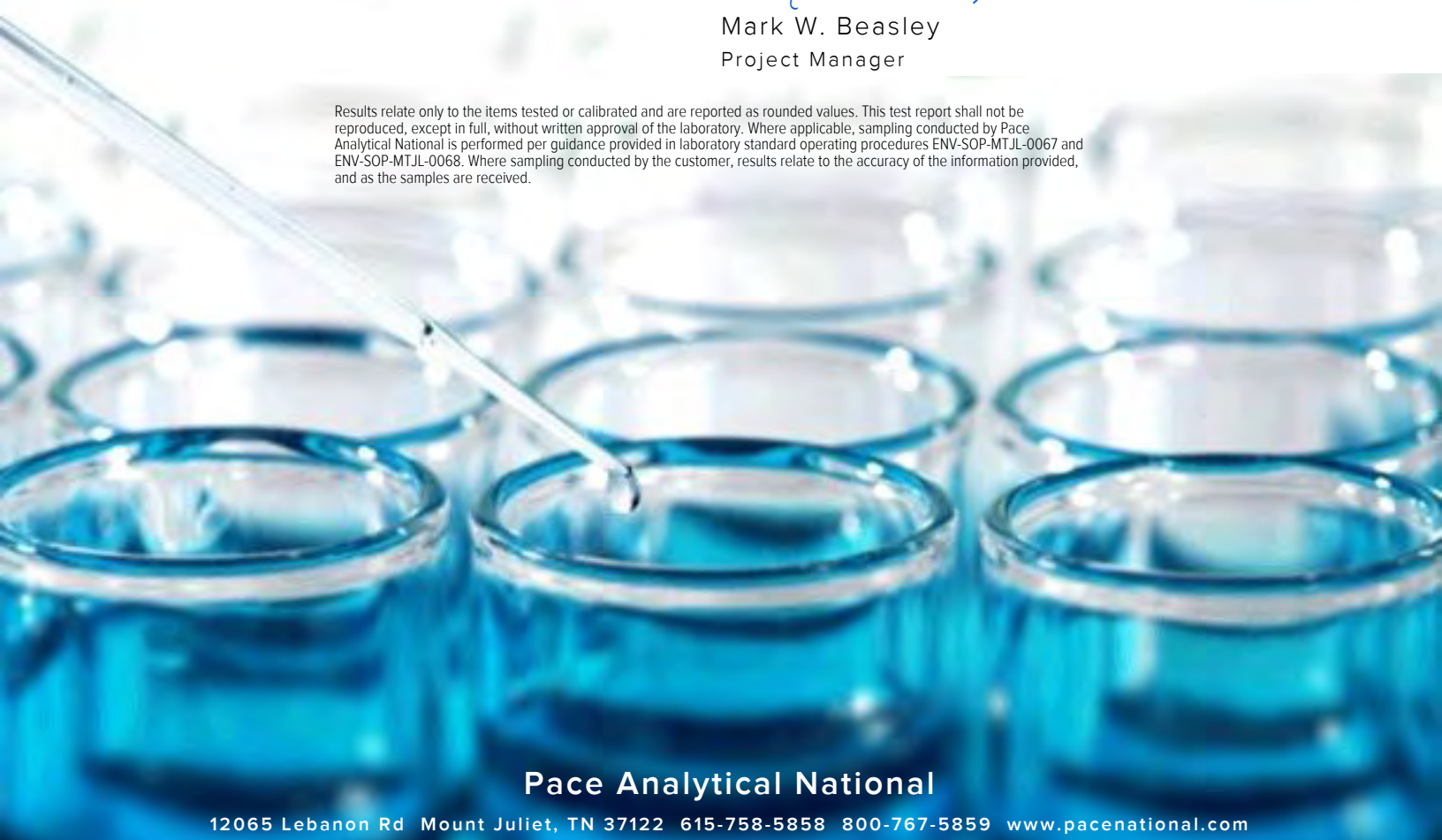


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "M. Beasley".

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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LEVEY WELL L1441293-01 Air

Collected by Aaron Marquez
Collected date/time 12/08/21 13:37
Received date/time 12/11/21 12:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1788413	80	12/14/21 00:01	12/14/21 00:01	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1790417	1000	12/16/21 13:49	12/16/21 13:49	MBF	Mt. Juliet, TN

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



Mark W. Beasley
Project Manager

¹ 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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 12/17/2021 10:32					
Project Name: Levey Well		Laboratory Job Number: L1441293-01					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1788413 and WG1790417					
#1	A2	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National		LRC Date: 12/17/2021 10:32					
Project Name: Levey Well		Laboratory Job Number: L1441293-01					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1788413 and WG1790417					
# 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: 12/17/2021 10:32	
Project Name: Levey Well		Laboratory Job Number: L1441293-01	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1788413 and WG1790417	
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: 12/08/21 13:37

L1441293

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	ND	ND		80	WG1788413
Allyl chloride	107-05-1	76.53	16.0	50.1	ND	ND		80	WG1788413
Benzene	71-43-2	78.10	16.0	51.1	21.6	69.0		80	WG1788413
Benzyl Chloride	100-44-7	127	16.0	83.1	ND	ND		80	WG1788413
Bromodichloromethane	75-27-4	164	16.0	107	ND	ND		80	WG1788413
Bromoform	75-25-2	253	48.0	497	ND	ND		80	WG1788413
Bromomethane	74-83-9	94.90	16.0	62.1	ND	ND		80	WG1788413
1,3-Butadiene	106-99-0	54.10	160	354	ND	ND		80	WG1788413
Carbon disulfide	75-15-0	76.10	16.0	49.8	ND	ND		80	WG1788413
Carbon tetrachloride	56-23-5	154	16.0	101	ND	ND		80	WG1788413
Chlorobenzene	108-90-7	113	16.0	73.9	ND	ND		80	WG1788413
Chloroethane	75-00-3	64.50	16.0	42.2	ND	ND		80	WG1788413
Chloroform	67-66-3	119	16.0	77.9	ND	ND		80	WG1788413
Chloromethane	74-87-3	50.50	16.0	33.0	ND	ND		80	WG1788413
2-Chlorotoluene	95-49-8	126	16.0	82.5	ND	ND		80	WG1788413
Cyclohexane	110-82-7	84.20	16.0	55.1	5600	19300		80	WG1788413
Dibromochloromethane	124-48-1	208	16.0	136	ND	ND		80	WG1788413
1,2-Dibromoethane	106-93-4	188	16.0	123	ND	ND		80	WG1788413
1,2-Dichlorobenzene	95-50-1	147	16.0	96.2	ND	ND		80	WG1788413
1,3-Dichlorobenzene	541-73-1	147	16.0	96.2	ND	ND		80	WG1788413
1,4-Dichlorobenzene	106-46-7	147	16.0	96.2	ND	ND		80	WG1788413
1,2-Dichloroethane	107-06-2	99	16.0	64.8	ND	ND		80	WG1788413
1,1-Dichloroethane	75-34-3	98	16.0	64.1	ND	ND		80	WG1788413
1,1-Dichloroethene	75-35-4	96.90	16.0	63.4	ND	ND		80	WG1788413
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	ND	ND		80	WG1788413
trans-1,2-Dichloroethene	156-60-5	96.90	16.0	63.4	ND	ND		80	WG1788413
1,2-Dichloropropane	78-87-5	113	16.0	73.9	ND	ND		80	WG1788413
cis-1,3-Dichloropropene	10061-01-5	111	16.0	72.6	ND	ND		80	WG1788413
trans-1,3-Dichloropropene	10061-02-6	111	16.0	72.6	ND	ND		80	WG1788413
1,4-Dioxane	123-91-1	88.10	16.0	57.7	ND	ND		80	WG1788413
Ethanol	64-17-5	46.10	100	189	529	997		80	WG1788413
Ethylbenzene	100-41-4	106	16.0	69.4	29.1	126		80	WG1788413
4-Ethyltoluene	622-96-8	120	16.0	78.5	24.6	121		80	WG1788413
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	ND	ND		80	WG1788413
Dichlorodifluoromethane	75-71-8	120.92	16.0	79.1	ND	ND		80	WG1788413
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	16.0	123	ND	ND		80	WG1788413
1,2-Dichlorotetrafluoroethane	76-14-2	171	16.0	112	ND	ND		80	WG1788413
Heptane	142-82-5	100	200	818	8810	36000		1000	WG1790417
Hexachloro-1,3-butadiene	87-68-3	261	50.4	538	ND	ND		80	WG1788413
n-Hexane	110-54-3	86.20	630	2220	38500	136000		1000	WG1790417
Isopropylbenzene	98-82-8	120.20	16.0	78.7	ND	ND		80	WG1788413
Methylene Chloride	75-09-2	84.90	16.0	55.6	21.9	76.0		80	WG1788413
Methyl Butyl Ketone	591-78-6	100	100	409	ND	ND		80	WG1788413
2-Butanone (MEK)	78-93-3	72.10	100	295	512	1510		80	WG1788413
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	100	409	ND	ND		80	WG1788413
Methyl methacrylate	80-62-6	100.12	16.0	65.5	ND	ND		80	WG1788413
MTBE	1634-04-4	88.10	16.0	57.7	ND	ND		80	WG1788413
Naphthalene	91-20-3	128	50.4	264	ND	ND		80	WG1788413
2-Propanol	67-63-0	60.10	100	246	2400	5900		80	WG1788413
Propene	115-07-1	42.10	100	172	ND	ND		80	WG1788413
Styrene	100-42-5	104	16.0	68.1	ND	ND		80	WG1788413
1,1,2,2-Tetrachloroethane	79-34-5	168	16.0	110	ND	ND		80	WG1788413
Tetrachloroethylene	127-18-4	166	16.0	109	ND	ND		80	WG1788413
Tetrahydrofuran	109-99-9	72.10	16.0	47.2	ND	ND		80	WG1788413
Toluene	108-88-3	92.10	40.0	151	79.2	298		80	WG1788413
1,2,4-Trichlorobenzene	120-82-1	181	50.4	373	ND	ND		80	WG1788413



Collected date/time: 12/08/21 13:37

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	16.0	87.0	ND	ND		80	WG1788413
1,1,2-Trichloroethane	79-00-5	133	16.0	87.0	ND	ND		80	WG1788413
Trichloroethylene	79-01-6	131	16.0	85.7	ND	ND		80	WG1788413
1,2,4-Trimethylbenzene	95-63-6	120	16.0	78.5	33.0	162		80	WG1788413
1,3,5-Trimethylbenzene	108-67-8	120	16.0	78.5	46.0	226		80	WG1788413
2,2,4-Trimethylpentane	540-84-1	114.22	16.0	74.7	ND	ND		80	WG1788413
Vinyl chloride	75-01-4	62.50	16.0	40.9	ND	ND		80	WG1788413
Vinyl Bromide	593-60-2	106.95	16.0	70.0	ND	ND		80	WG1788413
Vinyl acetate	108-05-4	86.10	16.0	56.3	ND	ND		80	WG1788413
m&p-Xylene	1330-20-7	106	32.0	139	36.1	157		80	WG1788413
o-Xylene	95-47-6	106	16.0	69.4	23.5	102		80	WG1788413
TPH (GC/MS) Low Fraction	8006-61-9	101	16000	66100	159000	657000		80	WG1788413
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.0				WG1788413
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		89.8				WG1790417

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3740098-3 12/13/21 09:45

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1441293-01

Method Blank (MB)

(MB) R3740098-3 12/13/21 09:45

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.103	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
Ethanol	U		0.265	1.25
TPH (GC/MS) Low Fraction	59.0	U	39.7	200
(S) 1,4-Bromofluorobenzene	90.0			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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

(LCS) R3740098-1 12/13/21 08:43 • (LCSD) R3740098-2 12/13/21 09:15

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.22	4.14	113	110	55.0-148			1.91	25
Propene	3.75	4.22	3.97	113	106	64.0-144			6.11	25
Dichlorodifluoromethane	3.75	4.16	4.05	111	108	64.0-139			2.68	25
1,2-Dichlorotetrafluoroethane	3.75	4.08	4.04	109	108	70.0-130			0.985	25
Chloromethane	3.75	4.22	4.06	113	108	70.0-130			3.86	25
Vinyl chloride	3.75	4.17	4.09	111	109	70.0-130			1.94	25

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

(LCS) R3740098-1 12/13/21 08:43 • (LCSD) R3740098-2 12/13/21 09:15

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,3-Butadiene	3.75	4.27	4.15	114	111	70.0-130			2.85	25
Bromomethane	3.75	4.15	4.08	111	109	70.0-130			1.70	25
Chloroethane	3.75	3.98	3.96	106	106	70.0-130			0.504	25
Trichlorofluoromethane	3.75	4.09	4.05	109	108	70.0-130			0.983	25
1,1,2-Trichlorotrifluoroethane	3.75	4.39	4.33	117	115	70.0-130			1.38	25
1,1-Dichloroethene	3.75	4.26	4.31	114	115	70.0-130			1.17	25
1,1-Dichloroethane	3.75	4.06	4.00	108	107	70.0-130			1.49	25
Acetone	3.75	4.54	4.42	121	118	70.0-130			2.68	25
2-Propanol	3.75	3.82	3.75	102	100	70.0-139			1.85	25
Carbon disulfide	3.75	4.43	4.34	118	116	70.0-130			2.05	25
Methylene Chloride	3.75	4.26	4.19	114	112	70.0-130			1.66	25
MTBE	3.75	3.99	3.91	106	104	70.0-130			2.03	25
trans-1,2-Dichloroethene	3.75	4.43	4.36	118	116	70.0-130			1.59	25
Vinyl acetate	3.75	4.18	4.03	111	107	70.0-130			3.65	25
Methyl Ethyl Ketone	3.75	4.08	4.01	109	107	70.0-130			1.73	25
cis-1,2-Dichloroethene	3.75	4.02	3.93	107	105	70.0-130			2.26	25
Chloroform	3.75	4.09	4.06	109	108	70.0-130			0.736	25
Cyclohexane	3.75	4.01	3.82	107	102	70.0-130			4.85	25
1,1,1-Trichloroethane	3.75	4.10	4.00	109	107	70.0-130			2.47	25
Carbon tetrachloride	3.75	4.08	3.99	109	106	70.0-130			2.23	25
Benzene	3.75	4.09	4.05	109	108	70.0-130			0.983	25
1,2-Dichloroethane	3.75	3.99	3.89	106	104	70.0-130			2.54	25
Trichloroethylene	3.75	4.10	4.03	109	107	70.0-130			1.72	25
1,2-Dichloropropane	3.75	4.11	3.99	110	106	70.0-130			2.96	25
1,4-Dioxane	3.75	3.64	3.68	97.1	98.1	70.0-140			1.09	25
Bromodichloromethane	3.75	4.16	4.06	111	108	70.0-130			2.43	25
cis-1,3-Dichloropropene	3.75	4.03	4.01	107	107	70.0-130			0.498	25
4-Methyl-2-pentanone (MIBK)	3.75	3.79	3.71	101	98.9	70.0-139			2.13	25
Toluene	3.75	3.98	3.92	106	105	70.0-130			1.52	25
trans-1,3-Dichloropropene	3.75	4.01	3.86	107	103	70.0-130			3.81	25
1,1,2-Trichloroethane	3.75	3.97	3.95	106	105	70.0-130			0.505	25
Tetrachloroethylene	3.75	3.96	3.88	106	103	70.0-130			2.04	25
Methyl Butyl Ketone	3.75	3.66	3.57	97.6	95.2	70.0-149			2.49	25
Dibromochloromethane	3.75	4.23	4.13	113	110	70.0-130			2.39	25
1,2-Dibromoethane	3.75	4.00	4.02	107	107	70.0-130			0.499	25
Chlorobenzene	3.75	4.04	4.04	108	108	70.0-130			0.000	25
Ethylbenzene	3.75	4.04	3.98	108	106	70.0-130			1.50	25
m&p-Xylene	7.50	7.96	7.88	106	105	70.0-130			1.01	25
o-Xylene	3.75	4.04	4.06	108	108	70.0-130			0.494	25
Styrene	3.75	4.05	3.98	108	106	70.0-130			1.74	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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

(LCS) R3740098-1 12/13/21 08:43 • (LCSD) R3740098-2 12/13/21 09:15

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	4.10	3.97	109	106	70.0-130			3.22	25
1,1,2,2-Tetrachloroethane	3.75	4.04	4.05	108	108	70.0-130			0.247	25
4-Ethyltoluene	3.75	4.11	4.07	110	109	70.0-130			0.978	25
1,3,5-Trimethylbenzene	3.75	4.15	4.08	111	109	70.0-130			1.70	25
1,2,4-Trimethylbenzene	3.75	4.06	4.03	108	107	70.0-130			0.742	25
1,3-Dichlorobenzene	3.75	4.05	4.00	108	107	70.0-130			1.24	25
1,4-Dichlorobenzene	3.75	3.99	3.86	106	103	70.0-130			3.31	25
Benzyl Chloride	3.75	4.07	4.05	109	108	70.0-152			0.493	25
1,2-Dichlorobenzene	3.75	4.04	4.05	108	108	70.0-130			0.247	25
1,2,4-Trichlorobenzene	3.75	3.83	3.91	102	104	70.0-160			2.07	25
Hexachloro-1,3-butadiene	3.75	3.56	3.70	94.9	98.7	70.0-151			3.86	25
Naphthalene	3.75	3.28	3.35	87.5	89.3	70.0-159			2.11	25
TPH (GC/MS) Low Fraction	203	247	245	122	121	70.0-130			0.813	25
Allyl Chloride	3.75	4.23	4.13	113	110	70.0-130			2.39	25
2-Chlorotoluene	3.75	4.16	4.11	111	110	70.0-130			1.21	25
Methyl Methacrylate	3.75	3.99	3.92	106	105	70.0-130			1.77	25
Tetrahydrofuran	3.75	3.99	3.92	106	105	70.0-137			1.77	25
2,2,4-Trimethylpentane	3.75	3.94	3.91	105	104	70.0-130			0.764	25
Vinyl Bromide	3.75	4.00	3.93	107	105	70.0-130			1.77	25
Isopropylbenzene	3.75	4.15	4.08	111	109	70.0-130			1.70	25
(S) 1,4-Bromofluorobenzene				98.4	97.4	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1441293-01](#)

Method Blank (MB)

(MB) R3741490-3 12/16/21 09:50

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	91.3			60.0-140

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

(LCS) R3741490-1 12/16/21 08:48 • (LCSD) R3741490-2 12/16/21 09:20

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Hexane	3.75	3.04	2.89	81.1	77.1	70.0-130			5.06	25
Heptane	3.75	3.03	2.86	80.8	76.3	70.0-130			5.77	25
(S) 1,4-Bromofluorobenzene				98.0	98.6	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

QualifierDescription

JThe identification of the analyte is acceptable; the reported value is an estimate.

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Ensolum, LLC

705 W. Wadley Ave, Ste 210
Midland, TX 79705

Report to:
Beaux Jennings

Project Description:

Levey Well

Phone: 210-219-8858

Collected by (print):

Heron Marquez

Collected by (signature):

[Signature]

Immediately

Packed on Ice N ☒ Y ☐

Billing Information:

Accounts Payable
2351 W Northwest Hwy. Ste.
1203
Dallas, TX 75220

Pres
Chk

Email To: bjennings@ensolum.com

City/State

Collected: Hobbs, NM

Please Circle:

PT MT CT ET

Client Project #

03B1417001

Lab Project #

ENSOLUMTX-SUMMA

Site/Facility ID #

03B1417001

P.O. #

03B1417001

Quote #

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☒ Three Day

Date Results Needed

No.
of
Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No.
of
Cntrs

Levey Well

G

Air

-

12-8-21

1337

1

X

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

2893 9462 1449

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☐ N
COC Signed/Accurate: ☒ Y ☐ N
Bottles arrive intact: ☒ Y ☐ N
Correct bottles used: ☒ Y ☐ N
Sufficient volume sent: ☒ Y ☐ N
If Applicable
VOA Zero Headspace: ☐ Y ☐ N
Preservation Correct/Checked: ☒ Y ☐ N
RAD Screen <0.5 mR/hr: ☐ Y ☐ N

Relinquished by: (Signature)

[Signature]

Date: 12-9-21

[Signature]

Time:

1:33

Received by: (Signature)

[Signature]

Trip Blank Received: Yes / No

HCL / MeOH
TBR

Relinquished by: (Signature)

[Signature]

Date:

Time:

Received by: (Signature)

[Signature]

Temp: °C

Bottles Received: 1

Relinquished by: (Signature)

[Signature]

Date:

Time:

Received for lab by: (Signature)

[Signature]

Date:

12/11/21

Time:

10:30

Hold:

Condition:

NCF / OK

Analysis / Container / Preservative

Chain of Custody Page 383 of 470



12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # 1441293

E059

Table

Acctnum: ENSOLUMTX

Template: T180734

Prelogin: P827709

PM: 134 - Mark W. Beasley

PB:

Shipped Via:

Remarks Sample # (lab only)

-C1



ANALYTICAL REPORT

December 27, 2021

Ensolum, LLC

Sample Delivery Group: L1444384
Samples Received: 12/20/2021
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
705 W. Wadley Ave, Ste 210
Midland, TX 79705

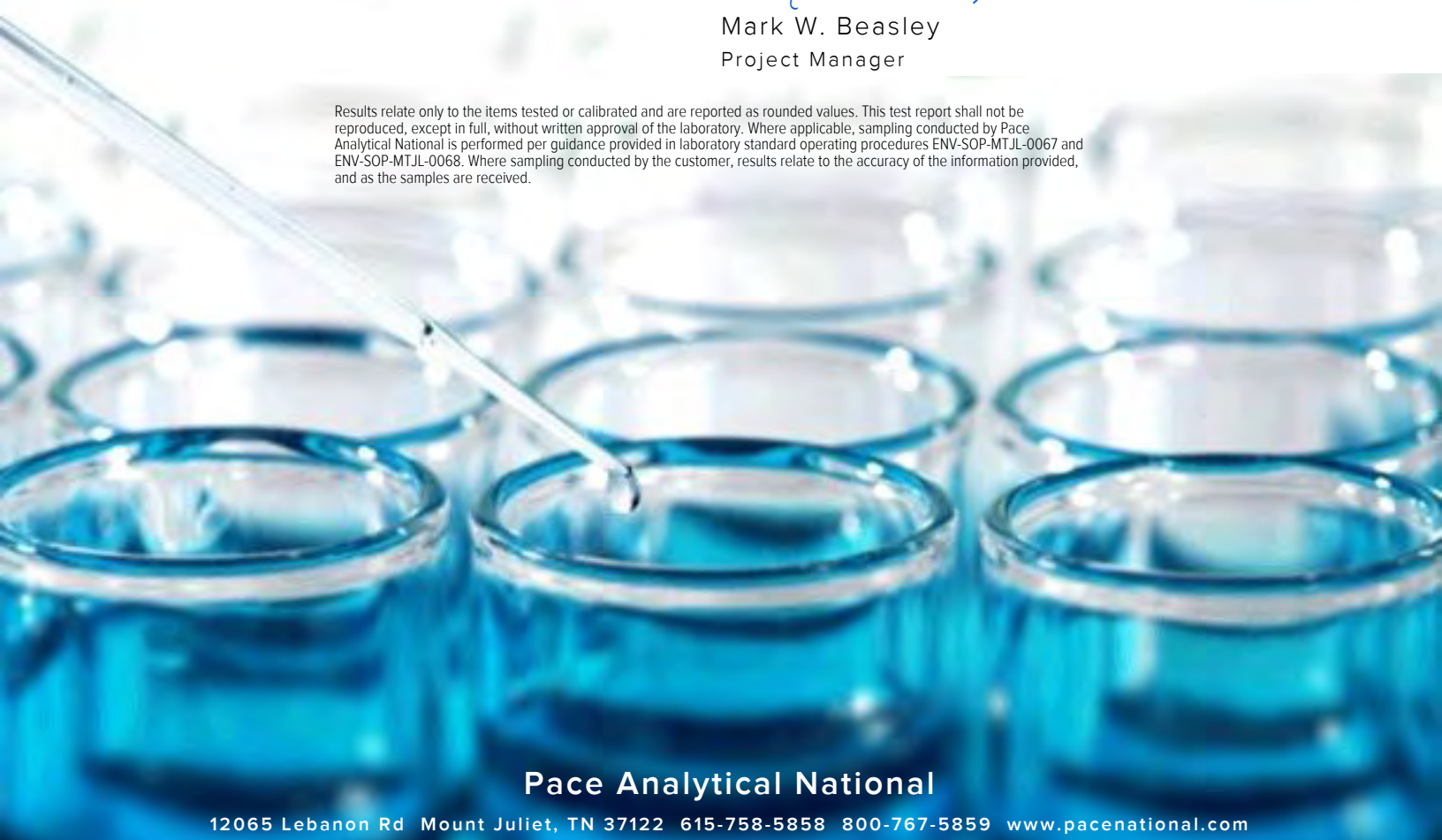


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "M. Beasley".

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1444384-01	9	⁶ Sr
Qc: Quality Control Summary	11	⁷ Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Gl: Glossary of Terms	17	⁸ Gl
Al: Accreditations & Locations	18	
Sc: Sample Chain of Custody	19	⁹ Al
		¹⁰ Sc

LEVEY WELL L1444384-01 Air

Collected by Aaron Marquez
Collected date/time 12/17/21 12:10
Received date/time 12/20/21 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1794176	200	12/23/21 21:21	12/23/21 21:21	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1794609	5000	12/24/21 23:49	12/24/21 23:49	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1795233	40000	12/27/21 15:22	12/27/21 15:22	CAW	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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



Mark W. Beasley
Project Manager

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 12/27/2021 16:27					
Project Name: Levey Well		Laboratory Job Number: L1444384-01					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1794176, WG1794609 and WG1795233					
#1	A2	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National			LRC Date: 12/27/2021 16:27				
Project Name: Levey Well			Laboratory Job Number: L1444384-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1794176, WG1794609 and WG1795233				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?			X		
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				
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Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National		LRC Date: 12/27/2021 16:27	
Project Name: Levey Well		Laboratory Job Number: L1444384-01	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1794176, WG1794609 and WG1795233	
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: 12/17/21 12:10

L1444384

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	250	594	2260	5370		200	WG1794176
Allyl chloride	107-05-1	76.53	40.0	125	ND	ND		200	WG1794176
Benzene	71-43-2	78.10	40.0	128	ND	ND		200	WG1794176
Benzyl Chloride	100-44-7	127	40.0	208	ND	ND		200	WG1794176
Bromodichloromethane	75-27-4	164	40.0	268	ND	ND		200	WG1794176
Bromoform	75-25-2	253	120	1240	ND	ND		200	WG1794176
Bromomethane	74-83-9	94.90	40.0	155	ND	ND		200	WG1794176
1,3-Butadiene	106-99-0	54.10	400	885	ND	ND		200	WG1794176
Carbon disulfide	75-15-0	76.10	40.0	124	ND	ND		200	WG1794176
Carbon tetrachloride	56-23-5	154	40.0	252	ND	ND		200	WG1794176
Chlorobenzene	108-90-7	113	40.0	185	ND	ND		200	WG1794176
Chloroethane	75-00-3	64.50	40.0	106	ND	ND		200	WG1794176
Chloroform	67-66-3	119	40.0	195	ND	ND		200	WG1794176
Chloromethane	74-87-3	50.50	40.0	82.6	ND	ND		200	WG1794176
2-Chlorotoluene	95-49-8	126	40.0	206	ND	ND		200	WG1794176
Cyclohexane	110-82-7	84.20	1000	3440	86600	298000		5000	WG1794609
Dibromochloromethane	124-48-1	208	40.0	340	ND	ND		200	WG1794176
1,2-Dibromoethane	106-93-4	188	40.0	308	ND	ND		200	WG1794176
1,2-Dichlorobenzene	95-50-1	147	40.0	240	ND	ND		200	WG1794176
1,3-Dichlorobenzene	541-73-1	147	40.0	240	ND	ND		200	WG1794176
1,4-Dichlorobenzene	106-46-7	147	40.0	240	ND	ND		200	WG1794176
1,2-Dichloroethane	107-06-2	99	40.0	162	ND	ND		200	WG1794176
1,1-Dichloroethane	75-34-3	98	40.0	160	ND	ND		200	WG1794176
1,1-Dichloroethene	75-35-4	96.90	40.0	159	ND	ND		200	WG1794176
cis-1,2-Dichloroethene	156-59-2	96.90	40.0	159	ND	ND		200	WG1794176
trans-1,2-Dichloroethene	156-60-5	96.90	40.0	159	ND	ND		200	WG1794176
1,2-Dichloropropane	78-87-5	113	40.0	185	ND	ND		200	WG1794176
cis-1,3-Dichloropropene	10061-01-5	111	40.0	182	ND	ND		200	WG1794176
trans-1,3-Dichloropropene	10061-02-6	111	40.0	182	ND	ND		200	WG1794176
1,4-Dioxane	123-91-1	88.10	40.0	144	ND	ND		200	WG1794176
Ethanol	64-17-5	46.10	250	471	509	960		200	WG1794176
Ethylbenzene	100-41-4	106	40.0	173	ND	ND		200	WG1794176
4-Ethyltoluene	622-96-8	120	40.0	196	ND	ND		200	WG1794176
Trichlorofluoromethane	75-69-4	137.40	40.0	225	ND	ND		200	WG1794176
Dichlorodifluoromethane	75-71-8	120.92	40.0	198	ND	ND		200	WG1794176
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	40.0	307	ND	ND		200	WG1794176
1,2-Dichlorotetrafluoroethane	76-14-2	171	40.0	280	ND	ND		200	WG1794176
Heptane	142-82-5	100	1000	4090	108000	442000		5000	WG1794609
Hexachloro-1,3-butadiene	87-68-3	261	126	1350	ND	ND		200	WG1794176
n-Hexane	110-54-3	86.20	25200	88800	845000	2980000		40000	WG1795233
Isopropylbenzene	98-82-8	120.20	40.0	197	ND	ND		200	WG1794176
Methylene Chloride	75-09-2	84.90	40.0	139	ND	ND		200	WG1794176
Methyl Butyl Ketone	591-78-6	100	250	1020	ND	ND		200	WG1794176
2-Butanone (MEK)	78-93-3	72.10	250	737	735	2170		200	WG1794176
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	250	1020	ND	ND		200	WG1794176
Methyl methacrylate	80-62-6	100.12	40.0	164	ND	ND		200	WG1794176
MTBE	1634-04-4	88.10	40.0	144	ND	ND		200	WG1794176
Naphthalene	91-20-3	128	126	660	ND	ND		200	WG1794176
2-Propanol	67-63-0	60.10	250	615	2000	4920		200	WG1794176
Propene	115-07-1	42.10	250	430	ND	ND		200	WG1794176
Styrene	100-42-5	104	40.0	170	ND	ND		200	WG1794176
1,1,2,2-Tetrachloroethane	79-34-5	168	40.0	275	ND	ND		200	WG1794176
Tetrachloroethylene	127-18-4	166	40.0	272	ND	ND		200	WG1794176
Tetrahydrofuran	109-99-9	72.10	40.0	118	ND	ND		200	WG1794176
Toluene	108-88-3	92.10	100	377	ND	ND		200	WG1794176
1,2,4-Trichlorobenzene	120-82-1	181	126	933	ND	ND		200	WG1794176

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/17/21 12:10

L1444384

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	40.0	218	ND	ND		200	WG1794176
1,1,2-Trichloroethane	79-00-5	133	40.0	218	ND	ND		200	WG1794176
Trichloroethylene	79-01-6	131	40.0	214	ND	ND		200	WG1794176
1,2,4-Trimethylbenzene	95-63-6	120	40.0	196	ND	ND		200	WG1794176
1,3,5-Trimethylbenzene	108-67-8	120	40.0	196	ND	ND		200	WG1794176
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	ND	ND		200	WG1794176
Vinyl chloride	75-01-4	62.50	40.0	102	ND	ND		200	WG1794176
Vinyl Bromide	593-60-2	106.95	40.0	175	ND	ND		200	WG1794176
Vinyl acetate	108-05-4	86.10	40.0	141	ND	ND		200	WG1794176
m&p-Xylene	1330-20-7	106	80.0	347	ND	ND		200	WG1794176
o-Xylene	95-47-6	106	40.0	173	ND	ND		200	WG1794176
TPH (GC/MS) Low Fraction	8006-61-9	101	1000000	4130000	1850000	7640000		5000	WG1794609
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.0				WG1794176
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1794609
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1795233

¹Cp²Tc³Ss⁴Cn⁵Tr⁶Sr⁷Qc⁸Gl⁹Al¹⁰Sc

Method Blank (MB)

(MB) R3744498-3 12/23/21 09:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	0.174	U	0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1444384-01

Method Blank (MB)

(MB) R3744498-3 12/23/21 09:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.419	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
Ethanol	U		0.265	1.25
(S) 1,4-Bromofluorobenzene	94.0			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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

(LCS) R3744498-1 12/23/21 08:37 • (LCSD) R3744498-2 12/23/21 09:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.01	4.20	107	112	55.0-148			4.63	25
Propene	3.75	3.74	3.77	99.7	101	64.0-144			0.799	25
Dichlorodifluoromethane	3.75	4.31	4.38	115	117	64.0-139			1.61	25
1,2-Dichlorotetrafluoroethane	3.75	4.33	4.35	115	116	70.0-130			0.461	25
Chloromethane	3.75	4.33	4.29	115	114	70.0-130			0.928	25
Vinyl chloride	3.75	4.40	4.52	117	121	70.0-130			2.69	25
1,3-Butadiene	3.75	3.91	4.03	104	107	70.0-130			3.02	25
Bromomethane	3.75	4.51	4.72	120	126	70.0-130			4.55	25

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

(LCS) R37444498-1 12/23/21 08:37 • (LCSD) R37444498-2 12/23/21 09:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloroethane	3.75	4.22	4.47	113	119	70.0-130			5.75	25
Trichlorofluoromethane	3.75	4.62	4.69	123	125	70.0-130			1.50	25
1,1,2-Trichlorotrifluoroethane	3.75	4.52	4.56	121	122	70.0-130			0.881	25
1,1-Dichloroethene	3.75	4.29	4.38	114	117	70.0-130			2.08	25
1,1-Dichloroethane	3.75	4.34	4.40	116	117	70.0-130			1.37	25
Acetone	3.75	3.96	3.93	106	105	70.0-130			0.760	25
2-Propanol	3.75	4.10	4.12	109	110	70.0-139			0.487	25
Carbon disulfide	3.75	4.43	4.45	118	119	70.0-130			0.450	25
Methylene Chloride	3.75	4.26	4.25	114	113	70.0-130			0.235	25
MTBE	3.75	4.33	4.38	115	117	70.0-130			1.15	25
trans-1,2-Dichloroethene	3.75	4.34	4.36	116	116	70.0-130			0.460	25
Vinyl acetate	3.75	4.03	3.67	107	97.9	70.0-130			9.35	25
Methyl Ethyl Ketone	3.75	4.37	4.38	117	117	70.0-130			0.229	25
cis-1,2-Dichloroethene	3.75	4.30	4.33	115	115	70.0-130			0.695	25
Chloroform	3.75	4.38	4.39	117	117	70.0-130			0.228	25
1,1,1-Trichloroethane	3.75	4.31	4.32	115	115	70.0-130			0.232	25
Carbon tetrachloride	3.75	4.40	4.46	117	119	70.0-130			1.35	25
Benzene	3.75	4.46	4.52	119	121	70.0-130			1.34	25
1,2-Dichloroethane	3.75	4.31	4.27	115	114	70.0-130			0.932	25
Trichloroethylene	3.75	4.45	4.51	119	120	70.0-130			1.34	25
1,2-Dichloropropane	3.75	4.43	4.45	118	119	70.0-130			0.450	25
1,4-Dioxane	3.75	4.46	4.47	119	119	70.0-140			0.224	25
Bromodichloromethane	3.75	4.38	4.42	117	118	70.0-130			0.909	25
cis-1,3-Dichloropropene	3.75	4.38	4.44	117	118	70.0-130			1.36	25
4-Methyl-2-pentanone (MIBK)	3.75	4.19	4.24	112	113	70.0-139			1.19	25
Toluene	3.75	4.52	4.54	121	121	70.0-130			0.442	25
trans-1,3-Dichloropropene	3.75	4.34	4.33	116	115	70.0-130			0.231	25
1,1,2-Trichloroethane	3.75	4.51	4.51	120	120	70.0-130			0.000	25
Tetrachloroethylene	3.75	4.71	4.76	126	127	70.0-130			1.06	25
Methyl Butyl Ketone	3.75	4.21	4.29	112	114	70.0-149			1.88	25
Dibromochloromethane	3.75	4.61	4.65	123	124	70.0-130			0.864	25
1,2-Dibromoethane	3.75	4.51	4.52	120	121	70.0-130			0.221	25
Chlorobenzene	3.75	4.64	4.66	124	124	70.0-130			0.430	25
Ethylbenzene	3.75	4.48	4.49	119	120	70.0-130			0.223	25
m&p-Xylene	7.50	9.03	9.02	120	120	70.0-130			0.111	25
o-Xylene	3.75	4.41	4.42	118	118	70.0-130			0.227	25
Styrene	3.75	4.53	4.54	121	121	70.0-130			0.221	25
Bromoform	3.75	4.72	4.67	126	125	70.0-130			1.06	25
1,1,2,2-Tetrachloroethane	3.75	4.49	4.52	120	121	70.0-130			0.666	25
4-Ethyltoluene	3.75	4.51	4.59	120	122	70.0-130			1.76	25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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

(LCS) R37444498-1 12/23/21 08:37 • (LCSD) R37444498-2 12/23/21 09:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,3,5-Trimethylbenzene	3.75	4.66	4.61	124	123	70.0-130			1.08	25
1,2,4-Trimethylbenzene	3.75	4.53	4.57	121	122	70.0-130			0.879	25
1,3-Dichlorobenzene	3.75	4.70	4.68	125	125	70.0-130			0.426	25
1,4-Dichlorobenzene	3.75	4.74	4.74	126	126	70.0-130			0.000	25
Benzyl Chloride	3.75	4.46	4.44	119	118	70.0-152			0.449	25
1,2-Dichlorobenzene	3.75	4.72	4.75	126	127	70.0-130			0.634	25
1,2,4-Trichlorobenzene	3.75	4.69	4.76	125	127	70.0-160			1.48	25
Hexachloro-1,3-butadiene	3.75	4.89	4.88	130	130	70.0-151			0.205	25
Naphthalene	3.75	4.61	4.64	123	124	70.0-159			0.649	25
Allyl Chloride	3.75	3.99	4.23	106	113	70.0-130			5.84	25
2-Chlorotoluene	3.75	4.57	4.55	122	121	70.0-130			0.439	25
Methyl Methacrylate	3.75	4.34	4.30	116	115	70.0-130			0.926	25
Tetrahydrofuran	3.75	4.19	4.20	112	112	70.0-137			0.238	25
2,2,4-Trimethylpentane	3.75	4.27	4.30	114	115	70.0-130			0.700	25
Vinyl Bromide	3.75	4.53	4.71	121	126	70.0-130			3.90	25
Isopropylbenzene	3.75	4.49	4.56	120	122	70.0-130			1.55	25
(S) 1,4-Bromofluorobenzene				96.1	95.7	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3744831-3 12/24/21 20:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	102			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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

(LCS) R3744831-1 12/24/21 19:04 • (LCSD) R3744831-2 12/24/21 19:45

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	3.77	3.83	101	102	70.0-130			1.58	25
Heptane	3.75	3.44	3.46	91.7	92.3	70.0-130			0.580	25
TPH (GC/MS) Low Fraction	203	194	198	95.6	97.5	70.0-130			2.04	25
(S) 1,4-Bromofluorobenzene				105	105	60.0-140				

Method Blank (MB)

(MB) R3745102-2 12/27/21 11:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	102			60.0-140

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

(LCS) R3745102-1 12/27/21 10:56 • (LCSD) R3745102-3 12/27/21 13:38

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	4.34	4.45	116	119	70.0-130			2.50	25
(S) 1,4-Bromofluorobenzene				104	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.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Analysis / Container / Preservative

Pres
Chk

Email To: bjennings@ensolum.com

Please Circle:
PT MT CT ET

ENSOLUMMTX-SUMMA

03B/4/7a1

Quote #

Date Results Needed

[illegible]

Cntrs

AM	
~~12-16-21~~	1216
12-17-21	

Flow	Other
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
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47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

Tracking #

Trip Blank Received: Yes / No
HCL / Meoh
TBR

Temp: °C Bottles Received

Date: _____ Time: _____

12-20-21 093

12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG # 6144384
E087

Acctnum: **ENSOLUMMTX**

Template:**T180734**

Prelogin: **P827709**

PM: 134 - Mark W. Beasley

PB:

Shipped Via:

Remarks	Sample # (lab only)



ANALYTICAL REPORT

December 27, 2021

Ensolum, LLC

Sample Delivery Group: L1444769
Samples Received: 12/21/2021
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
705 W. Wadley Ave, Ste 210
Midland, TX 79705

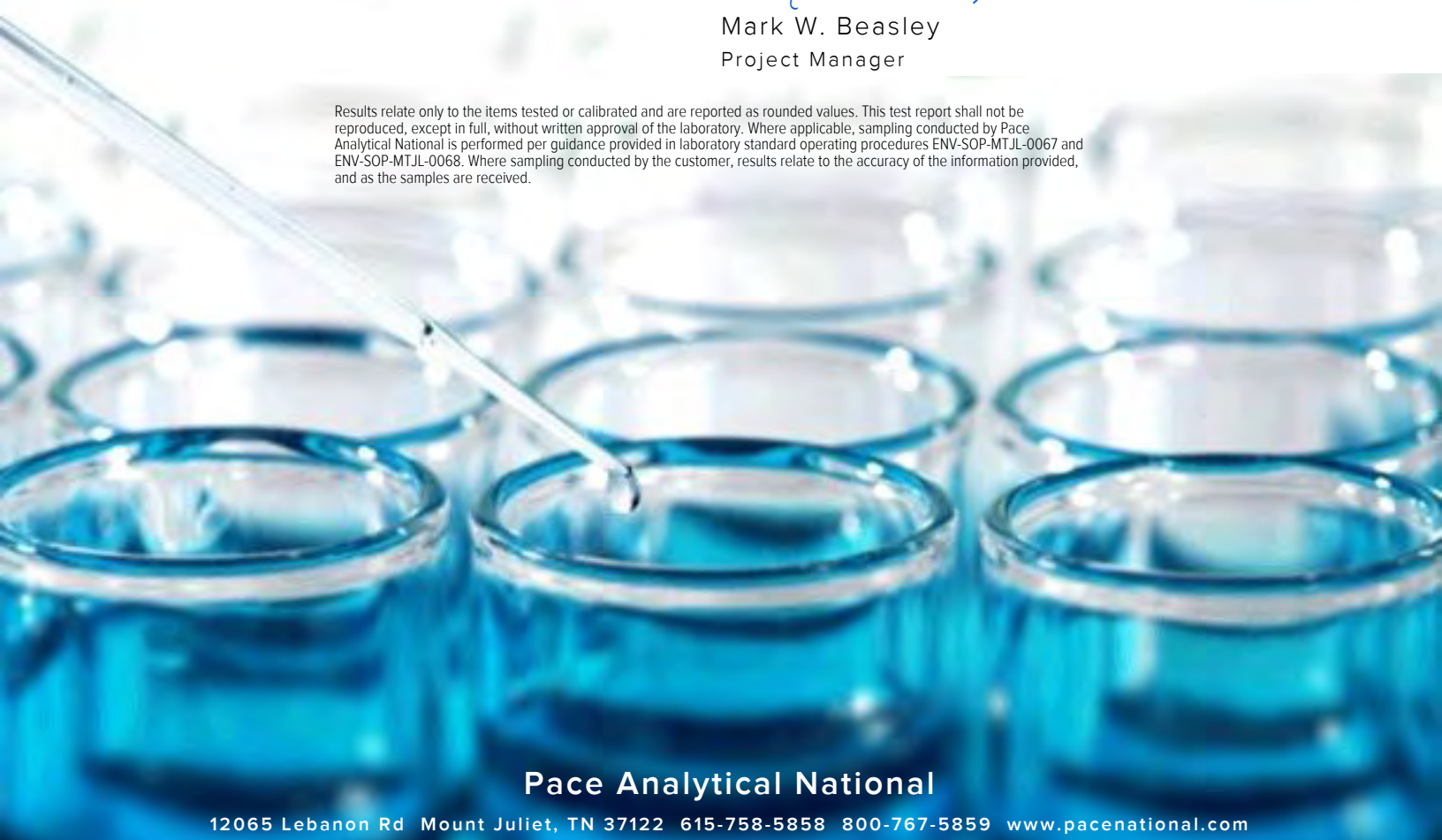


Entire Report Reviewed By:

A blue ink signature of Mark W. Beasley.

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1444769-01	9	⁶ Sr
LEVEY WELL L1444769-03	11	
LEVEY WELL L1444769-04	13	⁷ Qc
Qc: Quality Control Summary	15	⁸ Gl
Volatile Organic Compounds (MS) by Method TO-15	15	
Gl: Glossary of Terms	26	⁹ Al
Al: Accreditations & Locations	27	
Sc: Sample Chain of Custody	28	¹⁰ Sc

LEVEY WELL L1444769-01 Air

Collected by
Aaron Marquez

Collected date/time
12/20/21 09:29

Received date/time
12/21/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1794821	10000	12/26/21 22:22	12/26/21 22:22	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1795003	40000	12/27/21 11:10	12/27/21 11:10	CAW	Mt. Juliet, TN

¹Cp

²Tc

³Ss

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⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

LEVEY WELL L1444769-03 Air

Collected by
Aaron Marquez

Collected date/time
12/20/21 11:29

Received date/time
12/21/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1794821	50	12/26/21 13:00	12/26/21 13:00	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1794947	1000	12/26/21 23:01	12/26/21 23:01	DAH	Mt. Juliet, TN

LEVEY WELL L1444769-04 Air

Collected by
Aaron Marquez

Collected date/time
12/20/21 13:05

Received date/time
12/21/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1794176	20	12/23/21 23:56	12/23/21 23:56	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1794820	100	12/26/21 15:48	12/26/21 15:48	DAH	Mt. Juliet, TN

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



Mark W. Beasley
Project Manager

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ 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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National			LRC Date: 12/27/2021 14:51				
Project Name: Levey Well			Laboratory Job Number: L1444769-01, 03 and 04				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1794176, WG1794821, WG1794947, WG1794820 and WG1795003				
# 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: 12/27/2021 14:51				
Project Name: Levey Well			Laboratory Job Number: L1444769-01, 03 and 04				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1794176, WG1794821, WG1794947, WG1794820 and WG1795003				
# 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: 12/27/2021 14:51	
Project Name: Levey Well		Laboratory Job Number: L1444769-01, 03 and 04	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1794176, WG1794821, WG1794947, WG1794820 and WG1795003	
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: 12/20/21 09:29

L1444769

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	12500	29700	ND	ND		10000	WG1794821
Allyl chloride	107-05-1	76.53	2000	6260	ND	ND		10000	WG1794821
Benzene	71-43-2	78.10	2000	6390	ND	ND		10000	WG1794821
Benzyl Chloride	100-44-7	127	2000	10400	ND	ND		10000	WG1794821
Bromodichloromethane	75-27-4	164	2000	13400	ND	ND		10000	WG1794821
Bromoform	75-25-2	253	6000	62100	ND	ND		10000	WG1794821
Bromomethane	74-83-9	94.90	2000	7760	ND	ND		10000	WG1794821
1,3-Butadiene	106-99-0	54.10	20000	44300	ND	ND		10000	WG1794821
Carbon disulfide	75-15-0	76.10	2000	6220	ND	ND		10000	WG1794821
Carbon tetrachloride	56-23-5	154	2000	12600	ND	ND		10000	WG1794821
Chlorobenzene	108-90-7	113	2000	9240	ND	ND		10000	WG1794821
Chloroethane	75-00-3	64.50	2000	5280	ND	ND		10000	WG1794821
Chloroform	67-66-3	119	2000	9730	ND	ND		10000	WG1794821
Chloromethane	74-87-3	50.50	2000	4130	ND	ND		10000	WG1794821
2-Chlorotoluene	95-49-8	126	2000	10300	ND	ND		10000	WG1794821
Cyclohexane	110-82-7	84.20	2000	6890	110000	379000		10000	WG1794821
Dibromochloromethane	124-48-1	208	2000	17000	ND	ND		10000	WG1794821
1,2-Dibromoethane	106-93-4	188	2000	15400	ND	ND		10000	WG1794821
1,2-Dichlorobenzene	95-50-1	147	2000	12000	ND	ND		10000	WG1794821
1,3-Dichlorobenzene	541-73-1	147	2000	12000	ND	ND		10000	WG1794821
1,4-Dichlorobenzene	106-46-7	147	2000	12000	ND	ND		10000	WG1794821
1,2-Dichloroethane	107-06-2	99	2000	8100	ND	ND		10000	WG1794821
1,1-Dichloroethane	75-34-3	98	2000	8020	ND	ND		10000	WG1794821
1,1-Dichloroethene	75-35-4	96.90	2000	7930	ND	ND		10000	WG1794821
cis-1,2-Dichloroethene	156-59-2	96.90	2000	7930	ND	ND		10000	WG1794821
trans-1,2-Dichloroethene	156-60-5	96.90	2000	7930	ND	ND		10000	WG1794821
1,2-Dichloropropane	78-87-5	113	2000	9240	ND	ND		10000	WG1794821
cis-1,3-Dichloropropene	10061-01-5	111	2000	9080	ND	ND		10000	WG1794821
trans-1,3-Dichloropropene	10061-02-6	111	2000	9080	ND	ND		10000	WG1794821
1,4-Dioxane	123-91-1	88.10	2000	7210	ND	ND		10000	WG1794821
Ethanol	64-17-5	46.10	12500	23600	26700	50300		10000	WG1794821
Ethylbenzene	100-41-4	106	2000	8670	ND	ND		10000	WG1794821
4-Ethyltoluene	622-96-8	120	2000	9820	ND	ND		10000	WG1794821
Trichlorofluoromethane	75-69-4	137.40	2000	11200	ND	ND		10000	WG1794821
Dichlorodifluoromethane	75-71-8	120.92	2000	9890	ND	ND		10000	WG1794821
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	2000	15300	ND	ND		10000	WG1794821
1,2-Dichlorotetrafluoroethane	76-14-2	171	2000	14000	ND	ND		10000	WG1794821
Heptane	142-82-5	100	2000	8180	130000	532000		10000	WG1794821
Hexachloro-1,3-butadiene	87-68-3	261	6300	67300	ND	ND		10000	WG1794821
n-Hexane	110-54-3	86.20	25200	88800	958000	3380000		40000	WG1795003
Isopropylbenzene	98-82-8	120.20	2000	9830	ND	ND		10000	WG1794821
Methylene Chloride	75-09-2	84.90	2000	6940	ND	ND		10000	WG1794821
Methyl Butyl Ketone	591-78-6	100	12500	51100	ND	ND		10000	WG1794821
2-Butanone (MEK)	78-93-3	72.10	12500	36900	ND	ND		10000	WG1794821
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	12500	51200	ND	ND		10000	WG1794821
Methyl methacrylate	80-62-6	100.12	2000	8190	ND	ND		10000	WG1794821
MTBE	1634-04-4	88.10	2000	7210	ND	ND		10000	WG1794821
Naphthalene	91-20-3	128	6300	33000	ND	ND		10000	WG1794821
2-Propanol	67-63-0	60.10	12500	30700	79600	196000		10000	WG1794821
Propene	115-07-1	42.10	12500	21500	ND	ND		10000	WG1794821
Styrene	100-42-5	104	2000	8510	ND	ND		10000	WG1794821
1,1,2,2-Tetrachloroethane	79-34-5	168	2000	13700	ND	ND		10000	WG1794821
Tetrachloroethylene	127-18-4	166	2000	13600	ND	ND		10000	WG1794821
Tetrahydrofuran	109-99-9	72.10	2000	5900	ND	ND		10000	WG1794821
Toluene	108-88-3	92.10	5000	18800	ND	ND		10000	WG1794821
1,2,4-Trichlorobenzene	120-82-1	181	6300	46600	ND	ND		10000	WG1794821

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/20/21 09:29

L1444769

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	2000	10900	ND	ND		10000	WG1794821
1,1,2-Trichloroethane	79-00-5	133	2000	10900	ND	ND		10000	WG1794821
Trichloroethylene	79-01-6	131	2000	10700	ND	ND		10000	WG1794821
1,2,4-Trimethylbenzene	95-63-6	120	2000	9820	ND	ND		10000	WG1794821
1,3,5-Trimethylbenzene	108-67-8	120	2000	9820	ND	ND		10000	WG1794821
2,2,4-Trimethylpentane	540-84-1	114.22	2000	9340	ND	ND		10000	WG1794821
Vinyl chloride	75-01-4	62.50	2000	5110	ND	ND		10000	WG1794821
Vinyl Bromide	593-60-2	106.95	2000	8750	ND	ND		10000	WG1794821
Vinyl acetate	108-05-4	86.10	2000	7040	ND	ND		10000	WG1794821
m&p-Xylene	1330-20-7	106	4000	17300	ND	ND		10000	WG1794821
o-Xylene	95-47-6	106	2000	8670	ND	ND		10000	WG1794821
TPH (GC/MS) Low Fraction	8006-61-9	101	2000000	8260000	3390000	14000000		10000	WG1794821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG1794821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		90.0				WG1795003

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Collected date/time: 12/20/21 11:29

L1444769

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	62.5	149	501	1190		50	WG1794821
Allyl chloride	107-05-1	76.53	10.0	31.3	ND	ND		50	WG1794821
Benzene	71-43-2	78.10	10.0	31.9	ND	ND		50	WG1794821
Benzyl Chloride	100-44-7	127	10.0	51.9	ND	ND		50	WG1794821
Bromodichloromethane	75-27-4	164	10.0	67.1	ND	ND		50	WG1794821
Bromoform	75-25-2	253	30.0	310	ND	ND		50	WG1794821
Bromomethane	74-83-9	94.90	10.0	38.8	ND	ND		50	WG1794821
1,3-Butadiene	106-99-0	54.10	100	221	ND	ND		50	WG1794821
Carbon disulfide	75-15-0	76.10	10.0	31.1	ND	ND		50	WG1794821
Carbon tetrachloride	56-23-5	154	10.0	63.0	ND	ND		50	WG1794821
Chlorobenzene	108-90-7	113	10.0	46.2	ND	ND		50	WG1794821
Chloroethane	75-00-3	64.50	10.0	26.4	ND	ND		50	WG1794821
Chloroform	67-66-3	119	10.0	48.7	ND	ND		50	WG1794821
Chloromethane	74-87-3	50.50	10.0	20.7	ND	ND		50	WG1794821
2-Chlorotoluene	95-49-8	126	10.0	51.5	ND	ND		50	WG1794821
Cyclohexane	110-82-7	84.20	10.0	34.4	3030	10400		50	WG1794821
Dibromochloromethane	124-48-1	208	10.0	85.1	ND	ND		50	WG1794821
1,2-Dibromoethane	106-93-4	188	10.0	76.9	ND	ND		50	WG1794821
1,2-Dichlorobenzene	95-50-1	147	10.0	60.1	ND	ND		50	WG1794821
1,3-Dichlorobenzene	541-73-1	147	10.0	60.1	ND	ND		50	WG1794821
1,4-Dichlorobenzene	106-46-7	147	10.0	60.1	ND	ND		50	WG1794821
1,2-Dichloroethane	107-06-2	99	10.0	40.5	ND	ND		50	WG1794821
1,1-Dichloroethane	75-34-3	98	10.0	40.1	ND	ND		50	WG1794821
1,1-Dichloroethene	75-35-4	96.90	10.0	39.6	ND	ND		50	WG1794821
cis-1,2-Dichloroethene	156-59-2	96.90	10.0	39.6	ND	ND		50	WG1794821
trans-1,2-Dichloroethene	156-60-5	96.90	10.0	39.6	ND	ND		50	WG1794821
1,2-Dichloropropane	78-87-5	113	10.0	46.2	ND	ND		50	WG1794821
cis-1,3-Dichloropropene	10061-01-5	111	10.0	45.4	ND	ND		50	WG1794821
trans-1,3-Dichloropropene	10061-02-6	111	10.0	45.4	ND	ND		50	WG1794821
1,4-Dioxane	123-91-1	88.10	10.0	36.0	ND	ND		50	WG1794821
Ethanol	64-17-5	46.10	62.5	118	308	581		50	WG1794821
Ethylbenzene	100-41-4	106	10.0	43.4	21.3	92.3		50	WG1794821
4-Ethyltoluene	622-96-8	120	10.0	49.1	ND	ND		50	WG1794821
Trichlorofluoromethane	75-69-4	137.40	10.0	56.2	ND	ND		50	WG1794821
Dichlorodifluoromethane	75-71-8	120.92	10.0	49.5	ND	ND		50	WG1794821
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	10.0	76.6	ND	ND		50	WG1794821
1,2-Dichlorotetrafluoroethane	76-14-2	171	10.0	69.9	ND	ND		50	WG1794821
Heptane	142-82-5	100	200	818	4930	20200		1000	WG1794947
Hexachloro-1,3-butadiene	87-68-3	261	31.5	336	ND	ND		50	WG1794821
n-Hexane	110-54-3	86.20	630	2220	22800	80400		1000	WG1794947
Isopropylbenzene	98-82-8	120.20	10.0	49.2	ND	ND		50	WG1794821
Methylene Chloride	75-09-2	84.90	10.0	34.7	ND	ND		50	WG1794821
Methyl Butyl Ketone	591-78-6	100	62.5	256	ND	ND		50	WG1794821
2-Butanone (MEK)	78-93-3	72.10	62.5	184	97.1	286		50	WG1794821
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	62.5	256	ND	ND		50	WG1794821
Methyl methacrylate	80-62-6	100.12	10.0	40.9	ND	ND		50	WG1794821
MTBE	1634-04-4	88.10	10.0	36.0	ND	ND		50	WG1794821
Naphthalene	91-20-3	128	31.5	165	ND	ND		50	WG1794821
2-Propanol	67-63-0	60.10	62.5	154	1570	3860		50	WG1794821
Propene	115-07-1	42.10	62.5	108	ND	ND		50	WG1794821
Styrene	100-42-5	104	10.0	42.5	ND	ND		50	WG1794821
1,1,2,2-Tetrachloroethane	79-34-5	168	10.0	68.7	ND	ND		50	WG1794821
Tetrachloroethylene	127-18-4	166	10.0	67.9	ND	ND		50	WG1794821
Tetrahydrofuran	109-99-9	72.10	10.0	29.5	ND	ND		50	WG1794821
Toluene	108-88-3	92.10	25.0	94.2	32.5	122		50	WG1794821
1,2,4-Trichlorobenzene	120-82-1	181	31.5	233	ND	ND		50	WG1794821

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/20/21 11:29

L1444769

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	10.0	54.4	ND	ND		50	WG1794821
1,1,2-Trichloroethane	79-00-5	133	10.0	54.4	ND	ND		50	WG1794821
Trichloroethylene	79-01-6	131	10.0	53.6	ND	ND		50	WG1794821
1,2,4-Trimethylbenzene	95-63-6	120	10.0	49.1	23.0	113		50	WG1794821
1,3,5-Trimethylbenzene	108-67-8	120	10.0	49.1	20.3	99.6		50	WG1794821
2,2,4-Trimethylpentane	540-84-1	114.22	10.0	46.7	ND	ND		50	WG1794821
Vinyl chloride	75-01-4	62.50	10.0	25.6	ND	ND		50	WG1794821
Vinyl Bromide	593-60-2	106.95	10.0	43.7	ND	ND		50	WG1794821
Vinyl acetate	108-05-4	86.10	10.0	35.2	ND	ND		50	WG1794821
m&p-Xylene	1330-20-7	106	20.0	86.7	30.4	132		50	WG1794821
o-Xylene	95-47-6	106	10.0	43.4	12.9	55.9		50	WG1794821
TPH (GC/MS) Low Fraction	8006-61-9	101	10000	41300	94900	392000		50	WG1794821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG1794821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG1794947

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Collected date/time: 12/20/21 13:05

L1444769

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	25.0	59.4	306	727		20	WG1794176
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG1794176
Benzene	71-43-2	78.10	4.00	12.8	ND	ND		20	WG1794176
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG1794176
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG1794176
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG1794176
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG1794176
1,3-Butadiene	106-99-0	54.10	40.0	88.5	ND	ND		20	WG1794176
Carbon disulfide	75-15-0	76.10	4.00	12.4	ND	ND		20	WG1794176
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG1794176
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG1794176
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG1794176
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG1794176
Chloromethane	74-87-3	50.50	4.00	8.26	ND	ND		20	WG1794176
2-Chlorotoluene	95-49-8	126	4.00	20.6	ND	ND		20	WG1794176
Cyclohexane	110-82-7	84.20	4.00	13.8	1140	3930		20	WG1794176
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG1794176
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG1794176
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG1794176
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG1794176
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG1794176
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG1794176
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG1794176
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG1794176
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG1794176
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG1794176
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG1794176
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG1794176
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG1794176
1,4-Dioxane	123-91-1	88.10	4.00	14.4	ND	ND		20	WG1794176
Ethanol	64-17-5	46.10	25.0	47.1	ND	ND		20	WG1794176
Ethylbenzene	100-41-4	106	4.00	17.3	12.5	54.2		20	WG1794176
4-Ethyltoluene	622-96-8	120	4.00	19.6	9.70	47.6		20	WG1794176
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG1794176
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG1794176
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	4.00	30.7	ND	ND		20	WG1794176
1,2-Dichlorotetrafluoroethane	76-14-2	171	4.00	28.0	ND	ND		20	WG1794176
Heptane	142-82-5	100	20.0	81.8	615	2520		100	WG1794820
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG1794176
n-Hexane	110-54-3	86.20	63.0	222	1470	5180		100	WG1794820
Isopropylbenzene	98-82-8	120.20	4.00	19.7	5.20	25.6		20	WG1794176
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG1794176
Methyl Butyl Ketone	591-78-6	100	25.0	102	ND	ND		20	WG1794176
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	41.4	122		20	WG1794176
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	ND	ND		20	WG1794176
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG1794176
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG1794176
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG1794176
2-Propanol	67-63-0	60.10	25.0	61.5	275	676		20	WG1794176
Propene	115-07-1	42.10	25.0	43.0	ND	ND		20	WG1794176
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG1794176
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG1794176
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG1794176
Tetrahydrofuran	109-99-9	72.10	4.00	11.8	ND	ND		20	WG1794176
Toluene	108-88-3	92.10	10.0	37.7	ND	ND		20	WG1794176
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG1794176

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/20/21 13:05

L1444769

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	4.00	21.8	ND	ND		20	WG1794176
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG1794176
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG1794176
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	26.3	129		20	WG1794176
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	20.9	103		20	WG1794176
2,2,4-Trimethylpentane	540-84-1	114.22	4.00	18.7	ND	ND		20	WG1794176
Vinyl chloride	75-01-4	62.50	4.00	10.2	ND	ND		20	WG1794176
Vinyl Bromide	593-60-2	106.95	4.00	17.5	ND	ND		20	WG1794176
Vinyl acetate	108-05-4	86.10	4.00	14.1	ND	ND		20	WG1794176
m&p-Xylene	1330-20-7	106	8.00	34.7	19.8	85.8		20	WG1794176
o-Xylene	95-47-6	106	4.00	17.3	9.42	40.8		20	WG1794176
TPH (GC/MS) Low Fraction	8006-61-9	101	4000	16500	45400	188000		20	WG1794176
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.6				WG1794176
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.0				WG1794820

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3744498-3 12/23/21 09:57

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	0.174	U	0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3744498-3 12/23/21 09:57

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.419	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
Ethanol	U		0.265	1.25
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	94.0			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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

(LCS) R3744498-1 12/23/21 08:37 • (LCSD) R3744498-2 12/23/21 09:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.01	4.20	107	112	55.0-148			4.63	25
Propene	3.75	3.74	3.77	99.7	101	64.0-144			0.799	25
Dichlorodifluoromethane	3.75	4.31	4.38	115	117	64.0-139			1.61	25
1,2-Dichlorotetrafluoroethane	3.75	4.33	4.35	115	116	70.0-130			0.461	25
Chloromethane	3.75	4.33	4.29	115	114	70.0-130			0.928	25
Vinyl chloride	3.75	4.40	4.52	117	121	70.0-130			2.69	25

Volatile Organic Compounds (MS) by Method TO-15

L1444769-04

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

(LCS) R3744498-1 12/23/21 08:37 • (LCSD) R3744498-2 12/23/21 09:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,3-Butadiene	3.75	3.91	4.03	104	107	70.0-130			3.02	25
Bromomethane	3.75	4.51	4.72	120	126	70.0-130			4.55	25
Chloroethane	3.75	4.22	4.47	113	119	70.0-130			5.75	25
Trichlorofluoromethane	3.75	4.62	4.69	123	125	70.0-130			1.50	25
1,1,2-Trichlorotrifluoroethane	3.75	4.52	4.56	121	122	70.0-130			0.881	25
1,1-Dichloroethene	3.75	4.29	4.38	114	117	70.0-130			2.08	25
1,1-Dichloroethane	3.75	4.34	4.40	116	117	70.0-130			1.37	25
Acetone	3.75	3.96	3.93	106	105	70.0-130			0.760	25
2-Propanol	3.75	4.10	4.12	109	110	70.0-139			0.487	25
Carbon disulfide	3.75	4.43	4.45	118	119	70.0-130			0.450	25
Methylene Chloride	3.75	4.26	4.25	114	113	70.0-130			0.235	25
MTBE	3.75	4.33	4.38	115	117	70.0-130			1.15	25
trans-1,2-Dichloroethene	3.75	4.34	4.36	116	116	70.0-130			0.460	25
Vinyl acetate	3.75	4.03	3.67	107	97.9	70.0-130			9.35	25
Methyl Ethyl Ketone	3.75	4.37	4.38	117	117	70.0-130			0.229	25
cis-1,2-Dichloroethene	3.75	4.30	4.33	115	115	70.0-130			0.695	25
Chloroform	3.75	4.38	4.39	117	117	70.0-130			0.228	25
Cyclohexane	3.75	4.38	4.35	117	116	70.0-130			0.687	25
1,1,1-Trichloroethane	3.75	4.31	4.32	115	115	70.0-130			0.232	25
Carbon tetrachloride	3.75	4.40	4.46	117	119	70.0-130			1.35	25
Benzene	3.75	4.46	4.52	119	121	70.0-130			1.34	25
1,2-Dichloroethane	3.75	4.31	4.27	115	114	70.0-130			0.932	25
Trichloroethylene	3.75	4.45	4.51	119	120	70.0-130			1.34	25
1,2-Dichloropropane	3.75	4.43	4.45	118	119	70.0-130			0.450	25
1,4-Dioxane	3.75	4.46	4.47	119	119	70.0-140			0.224	25
Bromodichloromethane	3.75	4.38	4.42	117	118	70.0-130			0.909	25
cis-1,3-Dichloropropene	3.75	4.38	4.44	117	118	70.0-130			1.36	25
4-Methyl-2-pentanone (MIBK)	3.75	4.19	4.24	112	113	70.0-139			1.19	25
Toluene	3.75	4.52	4.54	121	121	70.0-130			0.442	25
trans-1,3-Dichloropropene	3.75	4.34	4.33	116	115	70.0-130			0.231	25
1,1,2-Trichloroethane	3.75	4.51	4.51	120	120	70.0-130			0.000	25
Tetrachloroethylene	3.75	4.71	4.76	126	127	70.0-130			1.06	25
Methyl Butyl Ketone	3.75	4.21	4.29	112	114	70.0-149			1.88	25
Dibromochloromethane	3.75	4.61	4.65	123	124	70.0-130			0.864	25
1,2-Dibromoethane	3.75	4.51	4.52	120	121	70.0-130			0.221	25
Chlorobenzene	3.75	4.64	4.66	124	124	70.0-130			0.430	25
Ethylbenzene	3.75	4.48	4.49	119	120	70.0-130			0.223	25
m&p-Xylene	7.50	9.03	9.02	120	120	70.0-130			0.111	25
o-Xylene	3.75	4.41	4.42	118	118	70.0-130			0.227	25
Styrene	3.75	4.53	4.54	121	121	70.0-130			0.221	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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

(LCS) R3744498-1 12/23/21 08:37 • (LCSD) R3744498-2 12/23/21 09:17

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	4.72	4.67	126	125	70.0-130			1.06	25
1,1,2,2-Tetrachloroethane	3.75	4.49	4.52	120	121	70.0-130			0.666	25
4-Ethyltoluene	3.75	4.51	4.59	120	122	70.0-130			1.76	25
1,3,5-Trimethylbenzene	3.75	4.66	4.61	124	123	70.0-130			1.08	25
1,2,4-Trimethylbenzene	3.75	4.53	4.57	121	122	70.0-130			0.879	25
1,3-Dichlorobenzene	3.75	4.70	4.68	125	125	70.0-130			0.426	25
1,4-Dichlorobenzene	3.75	4.74	4.74	126	126	70.0-130			0.000	25
Benzyl Chloride	3.75	4.46	4.44	119	118	70.0-152			0.449	25
1,2-Dichlorobenzene	3.75	4.72	4.75	126	127	70.0-130			0.634	25
1,2,4-Trichlorobenzene	3.75	4.69	4.76	125	127	70.0-160			1.48	25
Hexachloro-1,3-butadiene	3.75	4.89	4.88	130	130	70.0-151			0.205	25
Naphthalene	3.75	4.61	4.64	123	124	70.0-159			0.649	25
TPH (GC/MS) Low Fraction	203	246	246	121	121	70.0-130			0.000	25
Allyl Chloride	3.75	3.99	4.23	106	113	70.0-130			5.84	25
2-Chlorotoluene	3.75	4.57	4.55	122	121	70.0-130			0.439	25
Methyl Methacrylate	3.75	4.34	4.30	116	115	70.0-130			0.926	25
Tetrahydrofuran	3.75	4.19	4.20	112	112	70.0-137			0.238	25
2,2,4-Trimethylpentane	3.75	4.27	4.30	114	115	70.0-130			0.700	25
Vinyl Bromide	3.75	4.53	4.71	121	126	70.0-130			3.90	25
Isopropylbenzene	3.75	4.49	4.56	120	122	70.0-130			1.55	25
(S) 1,4-Bromofluorobenzene				96.1	95.7	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15 [L1444769-04](#)

Method Blank (MB)

(MB) R3744837-3 12/26/21 09:10

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	94.9			60.0-140

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

(LCS) R3744837-1 12/26/21 08:08 • (LCSD) R3744837-2 12/26/21 08:39

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Hexane	3.75	3.66	3.65	97.6	97.3	70.0-130			0.274	25
Heptane	3.75	3.78	3.74	101	99.7	70.0-130			1.06	25
(S) 1,4-Bromofluorobenzene				101	100	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3744832-3 12/26/21 09:39

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
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
Methylene Chloride	U		0.0979	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Volatile Organic Compounds (MS) by Method TO-15

L1444769-01,03

Method Blank (MB)

(MB) R3744832-3 12/26/21 09:39

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.193	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
Ethanol	U		0.265	1.25
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	101			60.0-140

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

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

(LCS) R3744832-1 12/26/21 08:18 • (LCSD) R3744832-2 12/26/21 08:59

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.68	3.56	98.1	94.9	55.0-148			3.31	25
Propene	3.75	3.94	3.91	105	104	64.0-144			0.764	25
Dichlorodifluoromethane	3.75	4.42	4.49	118	120	64.0-139			1.57	25
1,2-Dichlorotetrafluoroethane	3.75	4.20	4.22	112	113	70.0-130			0.475	25
Chloromethane	3.75	4.10	4.12	109	110	70.0-130			0.487	25

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

(LCS) R3744832-1 12/26/21 08:18 • (LCSD) R3744832-2 12/26/21 08:59

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 %
Vinyl chloride	3.75	4.10	4.06	109	108	70.0-130			0.980	25
1,3-Butadiene	3.75	3.88	3.85	103	103	70.0-130			0.776	25
Bromomethane	3.75	4.09	4.16	109	111	70.0-130			1.70	25
Chloroethane	3.75	4.11	4.25	110	113	70.0-130			3.35	25
Trichlorofluoromethane	3.75	4.12	4.12	110	110	70.0-130			0.000	25
1,1,2-Trichlorotrifluoroethane	3.75	4.05	4.08	108	109	70.0-130			0.738	25
1,1-Dichloroethene	3.75	4.07	4.09	109	109	70.0-130			0.490	25
1,1-Dichloroethane	3.75	4.08	4.08	109	109	70.0-130			0.000	25
Acetone	3.75	4.02	4.03	107	107	70.0-130			0.248	25
2-Propanol	3.75	3.83	3.84	102	102	70.0-139			0.261	25
Carbon disulfide	3.75	4.04	4.05	108	108	70.0-130			0.247	25
Methylene Chloride	3.75	4.04	4.06	108	108	70.0-130			0.494	25
MTBE	3.75	4.08	4.06	109	108	70.0-130			0.491	25
trans-1,2-Dichloroethene	3.75	4.01	3.98	107	106	70.0-130			0.751	25
Vinyl acetate	3.75	3.90	3.89	104	104	70.0-130			0.257	25
Methyl Ethyl Ketone	3.75	4.08	4.04	109	108	70.0-130			0.985	25
cis-1,2-Dichloroethene	3.75	4.01	4.02	107	107	70.0-130			0.249	25
Chloroform	3.75	4.02	4.03	107	107	70.0-130			0.248	25
Cyclohexane	3.75	4.01	4.03	107	107	70.0-130			0.498	25
1,1,1-Trichloroethane	3.75	4.00	4.00	107	107	70.0-130			0.000	25
Carbon tetrachloride	3.75	4.07	4.10	109	109	70.0-130			0.734	25
Benzene	3.75	3.83	3.85	102	103	70.0-130			0.521	25
1,2-Dichloroethane	3.75	3.79	3.80	101	101	70.0-130			0.264	25
Heptane	3.75	3.64	3.76	97.1	100	70.0-130			3.24	25
Trichloroethylene	3.75	3.80	3.80	101	101	70.0-130			0.000	25
1,2-Dichloropropane	3.75	3.86	3.84	103	102	70.0-130			0.519	25
1,4-Dioxane	3.75	3.97	3.91	106	104	70.0-140			1.52	25
Bromodichloromethane	3.75	3.88	3.87	103	103	70.0-130			0.258	25
cis-1,3-Dichloropropene	3.75	3.89	3.92	104	105	70.0-130			0.768	25
4-Methyl-2-pentanone (MIBK)	3.75	3.98	3.96	106	106	70.0-139			0.504	25
Toluene	3.75	3.85	3.86	103	103	70.0-130			0.259	25
trans-1,3-Dichloropropene	3.75	3.95	3.93	105	105	70.0-130			0.508	25
1,1,2-Trichloroethane	3.75	3.81	3.82	102	102	70.0-130			0.262	25
Tetrachloroethylene	3.75	3.87	3.81	103	102	70.0-130			1.56	25
Methyl Butyl Ketone	3.75	4.03	4.01	107	107	70.0-149			0.498	25
Dibromochloromethane	3.75	3.84	3.83	102	102	70.0-130			0.261	25
1,2-Dibromoethane	3.75	3.98	3.93	106	105	70.0-130			1.26	25
Chlorobenzene	3.75	3.95	3.95	105	105	70.0-130			0.000	25
Ethylbenzene	3.75	4.10	4.08	109	109	70.0-130			0.489	25
m&p-Xylene	7.50	8.12	8.11	108	108	70.0-130			0.123	25

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1444769-01,03

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

(LCS) R3744832-1 12/26/21 08:18 • (LCSD) R3744832-2 12/26/21 08:59

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
o-Xylene	3.75	3.96	3.94	106	105	70.0-130			0.506	25
Styrene	3.75	4.07	4.06	109	108	70.0-130			0.246	25
Bromoform	3.75	3.95	3.93	105	105	70.0-130			0.508	25
1,1,2,2-Tetrachloroethane	3.75	3.96	3.93	106	105	70.0-130			0.760	25
4-Ethyltoluene	3.75	4.17	4.19	111	112	70.0-130			0.478	25
1,3,5-Trimethylbenzene	3.75	3.95	3.91	105	104	70.0-130			1.02	25
1,2,4-Trimethylbenzene	3.75	4.02	4.01	107	107	70.0-130			0.249	25
1,3-Dichlorobenzene	3.75	4.29	4.27	114	114	70.0-130			0.467	25
1,4-Dichlorobenzene	3.75	4.36	4.37	116	117	70.0-130			0.229	25
Benzyl Chloride	3.75	5.06	5.01	135	134	70.0-152			0.993	25
1,2-Dichlorobenzene	3.75	4.15	4.13	111	110	70.0-130			0.483	25
1,2,4-Trichlorobenzene	3.75	3.47	3.47	92.5	92.5	70.0-160			0.000	25
Hexachloro-1,3-butadiene	3.75	3.88	3.88	103	103	70.0-151			0.000	25
Naphthalene	3.75	4.12	4.09	110	109	70.0-159			0.731	25
TPH (GC/MS) Low Fraction	203	214	213	105	105	70.0-130			0.468	25
Allyl Chloride	3.75	4.15	4.13	111	110	70.0-130			0.483	25
2-Chlorotoluene	3.75	4.04	4.03	108	107	70.0-130			0.248	25
Methyl Methacrylate	3.75	3.88	3.91	103	104	70.0-130			0.770	25
Tetrahydrofuran	3.75	4.02	4.00	107	107	70.0-137			0.499	25
2,2,4-Trimethylpentane	3.75	4.12	4.15	110	111	70.0-130			0.726	25
Vinyl Bromide	3.75	4.15	4.10	111	109	70.0-130			1.21	25
Isopropylbenzene	3.75	4.01	4.02	107	107	70.0-130			0.249	25
(S) 1,4-Bromofluorobenzene				105	104	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Volatile Organic Compounds (MS) by Method TO-15

L1444769-03

Method Blank (MB)

(MB) R3744833-3 12/26/21 09:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	101			60.0-140

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

(LCS) R3744833-1 12/26/21 08:18 • (LCSD) R3744833-2 12/26/21 08:59

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	4.08	4.05	109	108	70.0-130			0.738	25
Heptane	3.75	3.64	3.76	97.1	100	70.0-130			3.24	25
(S) 1,4-Bromofluorobenzene				105	104	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3745015-3 12/27/21 09:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	96.0			60.0-140

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

(LCS) R3745015-1 12/27/21 08:06 • (LCSD) R3745015-2 12/27/21 08:36

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	3.62	3.66	96.5	97.6	70.0-130			1.10	25
(S) 1,4-Bromofluorobenzene				99.9	98.8	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Sample Detection Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

QualifierDescription

J	The identification of the analyte is acceptable; the reported value is an estimate.

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Ensolum, LLC

705 W. Wadley Ave, Ste 210
Midland, TX 79705

Report to:

Beaux Jennings

Project Description:

Levey Well

Phone: 210-219-8858

Client Project #

03B1417001

Lab Project #

ENSOLUMTX-SUMMA

Collected by (print):

Aaron Marquez

Site/Facility ID #

03B1417001

P.O. #

03B1417001

Collected by (signature):

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☒ Two Day ☐ 10 Day (Rad Only)
☐ Three Day

Quote #

Date Results Needed

No.
of
CntrsImmediately
Packed on Ice N ☐ Y ☐

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cntrs

Levey Well

G

Air

-

12-20-2021

0429

1

X

Levey Well

↓

↓

-

12-20-2021

1016

1

X

Levey Well

↓

↓

-

12-20-2021

1129

1

X

Levey Well

G

Air

-

12-20-2021

1305

1

X

* Matrix:

SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

9883 0085 1416

Relinquished by: (Signature)

Date:

12-20-21

Time:

3:00pm

Received by: (Signature)

Trip Blank Received: Yes ☐ No ☒HCL/MeOH
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: °C

Bottles Received: 4

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

12/21/21 1015

Time:

Hold:

Condition:

NCF / OK

Analysis / Container / Preservative

Chain of Custody Page 430 of 470



12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions found at:
<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG #

444469

F077

Acctnum: ENSOLUMTX

Template: T180734

Prelogin: P827709

PM: 134 - Mark W. Beasley

PB:

Shipped Via:

Remarks

Sample # (lab only)

01

02

03

04

Sample Receipt Checklist

COC Seal Present/Intact: ☐ NP ☐ Y ☐ NCOC Signed/Accurate: ☐ Y ☐ NBottles arrive intact: ☐ Y ☐ NCorrect bottles used: ☐ Y ☐ NSufficient volume sent: ☐ Y ☐ N

If Applicable

VOA Zero Headpace: ☐ Y ☐ NPreservation Correct/Checked: ☐ Y ☐ NRAD Screen <0.5 mR/hr: ☐ Y ☐ N

If preservation required by Login: Date/Time



ANALYTICAL REPORT

December 29, 2021

Ensolum, LLC

Sample Delivery Group: L1445695
Samples Received: 12/23/2021
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
705 W. Wadley Ave, Ste 210
Midland, TX 79705

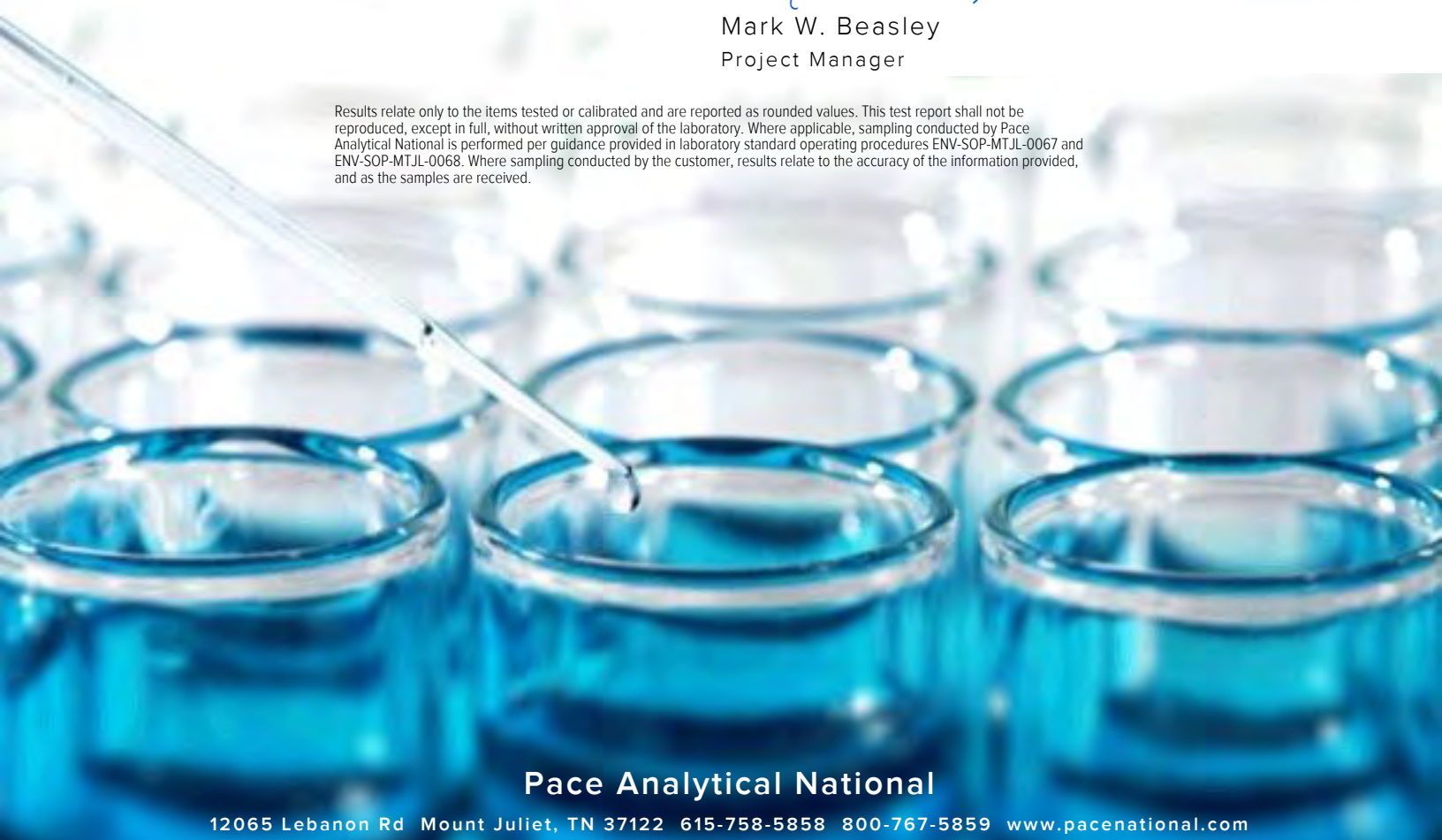


Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "M. Beasley".

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1445695-01	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 L1445695-01 Air

Collected by
Aaron Marquez

Collected date/time
12/22/21 11:30

Received date/time
12/23/21 09:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1794821	20	12/26/21 21:07	12/26/21 21:07	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1795003	500	12/27/21 16:02	12/27/21 16:02	CAW	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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



Mark W. Beasley
Project Manager

¹ 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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National			LRC Date: 12/29/2021 10:03				
Project Name: Levey Well			Laboratory Job Number: L1445695-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1794821 and WG1795003				
# 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: 12/29/2021 10:03				
Project Name: Levey Well			Laboratory Job Number: L1445695-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1794821 and WG1795003				
# 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: 12/29/2021 10:03
Project Name: Levey Well	Laboratory Job Number: L1445695-01
Reviewer Name: Mark W. Beasley	Prep Batch Number(s): WG1794821 and WG1795003
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: 12/22/21 11:30

L1445695

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	25.0	59.4	357	848		20	WG1794821
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG1794821
Benzene	71-43-2	78.10	4.00	12.8	ND	ND		20	WG1794821
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG1794821
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG1794821
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG1794821
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG1794821
1,3-Butadiene	106-99-0	54.10	40.0	88.5	ND	ND		20	WG1794821
Carbon disulfide	75-15-0	76.10	4.00	12.4	ND	ND		20	WG1794821
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG1794821
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG1794821
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG1794821
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG1794821
Chloromethane	74-87-3	50.50	4.00	8.26	ND	ND		20	WG1794821
2-Chlorotoluene	95-49-8	126	4.00	20.6	ND	ND		20	WG1794821
Cyclohexane	110-82-7	84.20	4.00	13.8	ND	ND		20	WG1794821
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG1794821
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG1794821
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG1794821
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG1794821
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG1794821
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG1794821
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG1794821
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG1794821
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG1794821
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG1794821
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG1794821
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG1794821
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG1794821
1,4-Dioxane	123-91-1	88.10	4.00	14.4	ND	ND		20	WG1794821
Ethanol	64-17-5	46.10	25.0	47.1	ND	ND		20	WG1794821
Ethylbenzene	100-41-4	106	4.00	17.3	9.66	41.9		20	WG1794821
4-Ethyltoluene	622-96-8	120	4.00	19.6	29.9	147		20	WG1794821
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG1794821
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG1794821
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	4.00	30.7	ND	ND		20	WG1794821
1,2-Dichlorotetrafluoroethane	76-14-2	171	4.00	28.0	ND	ND		20	WG1794821
Heptane	142-82-5	100	100	409	1720	7030		500	WG1795003
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG1794821
n-Hexane	110-54-3	86.20	315	1110	11900	42000		500	WG1795003
Isopropylbenzene	98-82-8	120.20	4.00	19.7	8.07	39.7		20	WG1794821
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG1794821
Methyl Butyl Ketone	591-78-6	100	25.0	102	ND	ND		20	WG1794821
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	ND	ND		20	WG1794821
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	ND	ND		20	WG1794821
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG1794821
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG1794821
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG1794821
2-Propanol	67-63-0	60.10	25.0	61.5	264	649		20	WG1794821
Propene	115-07-1	42.10	25.0	43.0	ND	ND		20	WG1794821
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG1794821
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG1794821
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG1794821
Tetrahydrofuran	109-99-9	72.10	4.00	11.8	ND	ND		20	WG1794821
Toluene	108-88-3	92.10	10.0	37.7	ND	ND		20	WG1794821
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG1794821

1 Cp

2 Tc

3 Ss

4 Cn

5 Tr

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Collected date/time: 12/22/21 11:30

L1445695

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	4.00	21.8	ND	ND		20	WG1794821
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG1794821
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG1794821
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	30.9	152		20	WG1794821
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	18.8	92.3		20	WG1794821
2,2,4-Trimethylpentane	540-84-1	114.22	4.00	18.7	ND	ND		20	WG1794821
Vinyl chloride	75-01-4	62.50	4.00	10.2	ND	ND		20	WG1794821
Vinyl Bromide	593-60-2	106.95	4.00	17.5	ND	ND		20	WG1794821
Vinyl acetate	108-05-4	86.10	4.00	14.1	ND	ND		20	WG1794821
m&p-Xylene	1330-20-7	106	8.00	34.7	25.5	111		20	WG1794821
o-Xylene	95-47-6	106	4.00	17.3	13.5	58.5		20	WG1794821
TPH (GC/MS) Low Fraction	8006-61-9	101	4000	16500	59900	247000		20	WG1794821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1794821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		90.6				WG1795003

¹ Cp² Tc³ Ss⁴ Cn⁵ Tr⁶ Sr⁷ Qc⁸ Gl⁹ Al¹⁰ Sc

Method Blank (MB)

(MB) R3744832-3 12/26/21 09:39

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
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3744832-3 12/26/21 09:39

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.193	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
Ethanol	U		0.265	1.25
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	101			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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

(LCS) R3744832-1 12/26/21 08:18 • (LCSD) R3744832-2 12/26/21 08:59

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.68	3.56	98.1	94.9	55.0-148			3.31	25
Propene	3.75	3.94	3.91	105	104	64.0-144			0.764	25
Dichlorodifluoromethane	3.75	4.42	4.49	118	120	64.0-139			1.57	25
1,2-Dichlorotetrafluoroethane	3.75	4.20	4.22	112	113	70.0-130			0.475	25
Chloromethane	3.75	4.10	4.12	109	110	70.0-130			0.487	25
Vinyl chloride	3.75	4.10	4.06	109	108	70.0-130			0.980	25

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

(LCS) R3744832-1 12/26/21 08:18 • (LCSD) R3744832-2 12/26/21 08:59

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,3-Butadiene	3.75	3.88	3.85	103	103	70.0-130			0.776	25
Bromomethane	3.75	4.09	4.16	109	111	70.0-130			1.70	25
Chloroethane	3.75	4.11	4.25	110	113	70.0-130			3.35	25
Trichlorofluoromethane	3.75	4.12	4.12	110	110	70.0-130			0.000	25
1,1,2-Trichlorotrifluoroethane	3.75	4.05	4.08	108	109	70.0-130			0.738	25
1,1-Dichloroethene	3.75	4.07	4.09	109	109	70.0-130			0.490	25
1,1-Dichloroethane	3.75	4.08	4.08	109	109	70.0-130			0.000	25
Acetone	3.75	4.02	4.03	107	107	70.0-130			0.248	25
2-Propanol	3.75	3.83	3.84	102	102	70.0-139			0.261	25
Carbon disulfide	3.75	4.04	4.05	108	108	70.0-130			0.247	25
Methylene Chloride	3.75	4.04	4.06	108	108	70.0-130			0.494	25
MTBE	3.75	4.08	4.06	109	108	70.0-130			0.491	25
trans-1,2-Dichloroethene	3.75	4.01	3.98	107	106	70.0-130			0.751	25
Vinyl acetate	3.75	3.90	3.89	104	104	70.0-130			0.257	25
Methyl Ethyl Ketone	3.75	4.08	4.04	109	108	70.0-130			0.985	25
cis-1,2-Dichloroethene	3.75	4.01	4.02	107	107	70.0-130			0.249	25
Chloroform	3.75	4.02	4.03	107	107	70.0-130			0.248	25
Cyclohexane	3.75	4.01	4.03	107	107	70.0-130			0.498	25
1,1,1-Trichloroethane	3.75	4.00	4.00	107	107	70.0-130			0.000	25
Carbon tetrachloride	3.75	4.07	4.10	109	109	70.0-130			0.734	25
Benzene	3.75	3.83	3.85	102	103	70.0-130			0.521	25
1,2-Dichloroethane	3.75	3.79	3.80	101	101	70.0-130			0.264	25
Trichloroethylene	3.75	3.80	3.80	101	101	70.0-130			0.000	25
1,2-Dichloropropane	3.75	3.86	3.84	103	102	70.0-130			0.519	25
1,4-Dioxane	3.75	3.97	3.91	106	104	70.0-140			1.52	25
Bromodichloromethane	3.75	3.88	3.87	103	103	70.0-130			0.258	25
cis-1,3-Dichloropropene	3.75	3.89	3.92	104	105	70.0-130			0.768	25
4-Methyl-2-pentanone (MIBK)	3.75	3.98	3.96	106	106	70.0-139			0.504	25
Toluene	3.75	3.85	3.86	103	103	70.0-130			0.259	25
trans-1,3-Dichloropropene	3.75	3.95	3.93	105	105	70.0-130			0.508	25
1,1,2-Trichloroethane	3.75	3.81	3.82	102	102	70.0-130			0.262	25
Tetrachloroethylene	3.75	3.87	3.81	103	102	70.0-130			1.56	25
Methyl Butyl Ketone	3.75	4.03	4.01	107	107	70.0-149			0.498	25
Dibromochloromethane	3.75	3.84	3.83	102	102	70.0-130			0.261	25
1,2-Dibromoethane	3.75	3.98	3.93	106	105	70.0-130			1.26	25
Chlorobenzene	3.75	3.95	3.95	105	105	70.0-130			0.000	25
Ethylbenzene	3.75	4.10	4.08	109	109	70.0-130			0.489	25
m&p-Xylene	7.50	8.12	8.11	108	108	70.0-130			0.123	25
o-Xylene	3.75	3.96	3.94	106	105	70.0-130			0.506	25
Styrene	3.75	4.07	4.06	109	108	70.0-130			0.246	25

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

(LCS) R3744832-1 12/26/21 08:18 • (LCSD) R3744832-2 12/26/21 08:59

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	3.95	3.93	105	105	70.0-130			0.508	25
1,1,2,2-Tetrachloroethane	3.75	3.96	3.93	106	105	70.0-130			0.760	25
4-Ethyltoluene	3.75	4.17	4.19	111	112	70.0-130			0.478	25
1,3,5-Trimethylbenzene	3.75	3.95	3.91	105	104	70.0-130			1.02	25
1,2,4-Trimethylbenzene	3.75	4.02	4.01	107	107	70.0-130			0.249	25
1,3-Dichlorobenzene	3.75	4.29	4.27	114	114	70.0-130			0.467	25
1,4-Dichlorobenzene	3.75	4.36	4.37	116	117	70.0-130			0.229	25
Benzyl Chloride	3.75	5.06	5.01	135	134	70.0-152			0.993	25
1,2-Dichlorobenzene	3.75	4.15	4.13	111	110	70.0-130			0.483	25
1,2,4-Trichlorobenzene	3.75	3.47	3.47	92.5	92.5	70.0-160			0.000	25
Hexachloro-1,3-butadiene	3.75	3.88	3.88	103	103	70.0-151			0.000	25
Naphthalene	3.75	4.12	4.09	110	109	70.0-159			0.731	25
TPH (GC/MS) Low Fraction	203	214	213	105	105	70.0-130			0.468	25
Allyl Chloride	3.75	4.15	4.13	111	110	70.0-130			0.483	25
2-Chlorotoluene	3.75	4.04	4.03	108	107	70.0-130			0.248	25
Methyl Methacrylate	3.75	3.88	3.91	103	104	70.0-130			0.770	25
Tetrahydrofuran	3.75	4.02	4.00	107	107	70.0-137			0.499	25
2,2,4-Trimethylpentane	3.75	4.12	4.15	110	111	70.0-130			0.726	25
Vinyl Bromide	3.75	4.15	4.10	111	109	70.0-130			1.21	25
Isopropylbenzene	3.75	4.01	4.02	107	107	70.0-130			0.249	25
(S) 1,4-Bromofluorobenzene				105	104	60.0-140				

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Volatile Organic Compounds (MS) by Method TO-15

L1445695-01

Method Blank (MB)

(MB) R3745015-3 12/27/21 09:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	96.0			60.0-140

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

(LCS) R3745015-1 12/27/21 08:06 • (LCSD) R3745015-2 12/27/21 08:36

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	3.62	3.66	96.5	97.6	70.0-130			1.10	25
Heptane	3.75	3.56	3.53	94.9	94.1	70.0-130			0.846	25
(S) 1,4-Bromofluorobenzene				99.9	98.8	60.0-140				

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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

JThe identification of the analyte is acceptable; the reported value is an estimate.

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Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

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ANALYTICAL REPORT

January 03, 2022

Ensolum, LLC

Sample Delivery Group: L1446899
Samples Received: 12/30/2021
Project Number: 03B1417001
Description: Levey Well
Site: 03B1417001
Report To: Beaux Jennings
705 W. Wadley Ave, Ste 210
Midland, TX 79705

Entire Report Reviewed By:

A handwritten signature in blue ink, appearing to read "M. Beasley".

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Tr: TRRP Summary	5	³ Ss
TRRP form R	6	
TRRP form S	7	⁴ Cn
TRRP Exception Reports	8	⁵ Tr
Sr: Sample Results	9	
LEVEY WELL L1446899-01	9	⁶ Sr
Qc: Quality Control Summary	11	⁷ Qc
Volatile Organic Compounds (MS) by Method TO-15	11	
Gl: Glossary of Terms	15	⁸ Gl
Al: Accreditations & Locations	16	
Sc: Sample Chain of Custody	17	⁹ Al
		¹⁰ Sc

LEVEY WELL L1446899-01 Air

Collected by
Aaron Marquez

Collected date/time
12/29/21 12:15

Received date/time
12/30/21 13:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1796821	10	12/30/21 18:10	12/30/21 18:10	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1796967	100	12/31/21 15:16	12/31/21 15:16	FKG	Mt. Juliet, TN

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



Mark W. Beasley
Project Manager

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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.



Mark W. Beasley
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National		LRC Date: 01/03/2022 14:38					
Project Name: Levey Well		Laboratory Job Number: L1446899-01					
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1796821 and WG1796967					
# 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: 01/03/2022 14:38				
Project Name: Levey Well			Laboratory Job Number: L1446899-01				
Reviewer Name: Mark W. Beasley			Prep Batch Number(s): WG1796821 and WG1796967				
# 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: 01/03/2022 14:38	
Project Name: Levey Well		Laboratory Job Number: L1446899-01	
Reviewer Name: Mark W. Beasley		Prep Batch Number(s): WG1796821 and WG1796967	
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: 12/29/21 12:15

L1446899

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	WG1796967
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1796967
Benzene	71-43-2	78.10	2.00	6.39	ND	ND		10	WG1796821
Benzyl Chloride	100-44-7	127	2.00	10.4	ND	ND		10	WG1796821
Bromodichloromethane	75-27-4	164	2.00	13.4	ND	ND		10	WG1796821
Bromoform	75-25-2	253	6.00	62.1	ND	ND		10	WG1796821
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1796967
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1796967
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1796967
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1796967
Chlorobenzene	108-90-7	113	2.00	9.24	ND	ND		10	WG1796821
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1796967
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1796967
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1796967
2-Chlorotoluene	95-49-8	126	2.00	10.3	ND	ND		10	WG1796821
Cyclohexane	110-82-7	84.20	20.0	68.9	146	503		100	WG1796967
Dibromochloromethane	124-48-1	208	2.00	17.0	ND	ND		10	WG1796821
1,2-Dibromoethane	106-93-4	188	2.00	15.4	ND	ND		10	WG1796821
1,2-Dichlorobenzene	95-50-1	147	2.00	12.0	ND	ND		10	WG1796821
1,3-Dichlorobenzene	541-73-1	147	2.00	12.0	ND	ND		10	WG1796821
1,4-Dichlorobenzene	106-46-7	147	2.00	12.0	ND	ND		10	WG1796821
1,2-Dichloroethane	107-06-2	99	2.00	8.10	ND	ND		10	WG1796821
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1796967
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1796967
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1796967
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1796967
1,2-Dichloropropane	78-87-5	113	2.00	9.24	ND	ND		10	WG1796821
cis-1,3-Dichloropropene	10061-01-5	111	2.00	9.08	ND	ND		10	WG1796821
trans-1,3-Dichloropropene	10061-02-6	111	2.00	9.08	ND	ND		10	WG1796821
1,4-Dioxane	123-91-1	88.10	2.00	7.21	ND	ND		10	WG1796821
Ethanol	64-17-5	46.10	125	236	791	1490		100	WG1796967
Ethylbenzene	100-41-4	106	2.00	8.67	5.04	21.9		10	WG1796821
4-Ethyltoluene	622-96-8	120	2.00	9.82	8.99	44.1		10	WG1796821
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1796967
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1796967
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1796967
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1796967
Heptane	142-82-5	100	20.0	81.8	154	630		100	WG1796967
Hexachloro-1,3-butadiene	87-68-3	261	6.30	67.3	ND	ND		10	WG1796821
n-Hexane	110-54-3	86.20	63.0	222	1640	5780		100	WG1796967
Isopropylbenzene	98-82-8	120.20	2.00	9.83	7.57	37.2		10	WG1796821
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1796967
Methyl Butyl Ketone	591-78-6	100	12.5	51.1	ND	ND		10	WG1796821
2-Butanone (MEK)	78-93-3	72.10	125	369	ND	ND		100	WG1796967
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	12.5	51.2	ND	ND		10	WG1796821
Methyl methacrylate	80-62-6	100.12	2.00	8.19	ND	ND		10	WG1796821
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1796967
Naphthalene	91-20-3	128	6.30	33.0	ND	ND		10	WG1796821
2-Propanol	67-63-0	60.10	125	307	453	1110		100	WG1796967
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1796967
Styrene	100-42-5	104	2.00	8.51	ND	ND		10	WG1796821
1,1,2,2-Tetrachloroethane	79-34-5	168	2.00	13.7	ND	ND		10	WG1796821
Tetrachloroethylene	127-18-4	166	2.00	13.6	ND	ND		10	WG1796821
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1796967
Toluene	108-88-3	92.10	5.00	18.8	ND	ND		10	WG1796821
1,2,4-Trichlorobenzene	120-82-1	181	6.30	46.6	ND	ND		10	WG1796821



Collected date/time: 12/29/21 12:15

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	WG1796967
1,1,2-Trichloroethane	79-00-5	133	2.00	10.9	ND	ND		10	WG1796821
Trichloroethylene	79-01-6	131	2.00	10.7	ND	ND		10	WG1796821
1,2,4-Trimethylbenzene	95-63-6	120	2.00	9.82	22.8	112		10	WG1796821
1,3,5-Trimethylbenzene	108-67-8	120	2.00	9.82	12.9	63.3		10	WG1796821
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	ND	ND		100	WG1796967
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1796967
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1796967
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1796967
m&p-Xylene	1330-20-7	106	4.00	17.3	17.4	75.4		10	WG1796821
o-Xylene	95-47-6	106	2.00	8.67	7.30	31.6		10	WG1796821
TPH (GC/MS) Low Fraction	8006-61-9	101	2000	8260	ND	ND		10	WG1796821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1796821
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.5				WG1796967

Sample Narrative:
L1446899-01 WG1796821: Surrogate failure due to matrix interference

1Cp

2Tc

3Ss

4Cn

5Tr

6Sr

7Qc

8Gl

9Al

10Sc

Method Blank (MB)

(MB) R3746547-3 12/30/21 09:37

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
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
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
TPH (GC/MS) Low Fraction	58.4	U	39.7	200
(S) 1,4-Bromofluorobenzene	92.3			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) R3746547-1 12/30/21 08:35 • (LCSD) R3746547-2 12/30/21 09:07

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	3.75	3.96	3.88	106	103	70.0-130			2.04	25
1,2-Dichloroethane	3.75	3.97	3.93	106	105	70.0-130			1.01	25
Trichloroethylene	3.75	3.92	3.81	105	102	70.0-130			2.85	25
1,2-Dichloropropane	3.75	3.87	3.89	103	104	70.0-130			0.515	25
1,4-Dioxane	3.75	4.00	3.92	107	105	70.0-140			2.02	25
Bromodichloromethane	3.75	3.87	3.80	103	101	70.0-130			1.83	25
cis-1,3-Dichloropropene	3.75	3.85	3.95	103	105	70.0-130			2.56	25
4-Methyl-2-pentanone (MIBK)	3.75	3.76	3.79	100	101	70.0-139			0.795	25
Toluene	3.75	3.85	3.87	103	103	70.0-130			0.518	25
trans-1,3-Dichloropropene	3.75	3.95	3.90	105	104	70.0-130			1.27	25
1,1,2-Trichloroethane	3.75	4.06	3.95	108	105	70.0-130			2.75	25
Tetrachloroethylene	3.75	4.18	4.14	111	110	70.0-130			0.962	25
Methyl Butyl Ketone	3.75	3.87	3.79	103	101	70.0-149			2.09	25
Dibromochloromethane	3.75	4.02	3.99	107	106	70.0-130			0.749	25
1,2-Dibromoethane	3.75	4.01	4.01	107	107	70.0-130			0.000	25
Chlorobenzene	3.75	3.94	4.00	105	107	70.0-130			1.51	25
Ethylbenzene	3.75	3.98	3.90	106	104	70.0-130			2.03	25
m&p-Xylene	7.50	7.87	7.59	105	101	70.0-130			3.62	25
o-Xylene	3.75	3.97	3.89	106	104	70.0-130			2.04	25
Styrene	3.75	4.22	4.18	113	111	70.0-130			0.952	25
Bromoform	3.75	4.10	4.01	109	107	70.0-130			2.22	25
1,1,2,2-Tetrachloroethane	3.75	3.93	3.80	105	101	70.0-130			3.36	25
4-Ethyltoluene	3.75	4.17	4.11	111	110	70.0-130			1.45	25
1,3,5-Trimethylbenzene	3.75	4.12	3.97	110	106	70.0-130			3.71	25
1,2,4-Trimethylbenzene	3.75	3.98	3.93	106	105	70.0-130			1.26	25
1,3-Dichlorobenzene	3.75	4.37	4.25	117	113	70.0-130			2.78	25
1,4-Dichlorobenzene	3.75	4.40	4.27	117	114	70.0-130			3.00	25
Benzyl Chloride	3.75	4.04	3.86	108	103	70.0-152			4.56	25
1,2-Dichlorobenzene	3.75	4.28	4.23	114	113	70.0-130			1.18	25
1,2,4-Trichlorobenzene	3.75	5.65	5.52	151	147	70.0-160			2.33	25
Hexachloro-1,3-butadiene	3.75	4.22	4.13	113	110	70.0-151			2.16	25
Naphthalene	3.75	4.99	4.82	133	129	70.0-159			3.47	25
TPH (GC/MS) Low Fraction	203	247	243	122	120	70.0-130			1.63	25
2-Chlorotoluene	3.75	4.05	3.95	108	105	70.0-130			2.50	25
Methyl Methacrylate	3.75	4.06	4.00	108	107	70.0-130			1.49	25
Isopropylbenzene	3.75	4.04	3.99	108	106	70.0-130			1.25	25
(S) 1,4-Bromofluorobenzene				100	98.9	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

Method Blank (MB)

(MB) R3746671-3 12/31/21 07:41

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
Cyclohexane	U		0.0753	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
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
n-Hexane	U		0.206	0.630
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	0.213	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
Ethanol	U		0.265	1.25
(S) 1,4-Bromofluorobenzene	94.3			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Tr

⁶Sr

⁷Qc

⁸Gl

⁹Al

¹⁰Sc

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

(LCS) R3746671-1 12/31/21 06:15 • (LCSD) R3746671-2 12/31/21 06:58

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.00	4.01	107	107	55.0-148			0.250	25
Propene	3.75	4.02	3.96	107	106	64.0-144			1.50	25
Dichlorodifluoromethane	3.75	3.70	3.69	98.7	98.4	64.0-139			0.271	25
1,2-Dichlorotetrafluoroethane	3.75	4.14	4.14	110	110	70.0-130			0.000	25
Chloromethane	3.75	3.84	3.99	102	106	70.0-130			3.83	25
Vinyl chloride	3.75	4.03	4.03	107	107	70.0-130			0.000	25
1,3-Butadiene	3.75	3.91	3.99	104	106	70.0-130			2.03	25
Bromomethane	3.75	4.10	4.02	109	107	70.0-130			1.97	25
Chloroethane	3.75	4.04	4.14	108	110	70.0-130			2.44	25
Trichlorofluoromethane	3.75	4.13	4.14	110	110	70.0-130			0.242	25
1,1,2-Trichlorotrifluoroethane	3.75	4.08	4.18	109	111	70.0-130			2.42	25
1,1-Dichloroethene	3.75	4.07	4.13	109	110	70.0-130			1.46	25
1,1-Dichloroethane	3.75	4.07	4.16	109	111	70.0-130			2.19	25
Acetone	3.75	4.28	4.34	114	116	70.0-130			1.39	25
2-Propanol	3.75	3.97	4.01	106	107	70.0-139			1.00	25
Carbon disulfide	3.75	3.85	3.87	103	103	70.0-130			0.518	25
Methylene Chloride	3.75	4.06	4.06	108	108	70.0-130			0.000	25
MTBE	3.75	3.99	4.03	106	107	70.0-130			0.998	25
trans-1,2-Dichloroethene	3.75	4.16	4.17	111	111	70.0-130			0.240	25
n-Hexane	3.75	4.07	4.20	109	112	70.0-130			3.14	25
Vinyl acetate	3.75	3.82	4.07	102	109	70.0-130			6.34	25
Methyl Ethyl Ketone	3.75	4.16	4.12	111	110	70.0-130			0.966	25
cis-1,2-Dichloroethene	3.75	4.08	4.16	109	111	70.0-130			1.94	25
Chloroform	3.75	4.08	4.10	109	109	70.0-130			0.489	25
Cyclohexane	3.75	4.11	4.22	110	113	70.0-130			2.64	25
1,1,1-Trichloroethane	3.75	4.03	4.12	107	110	70.0-130			2.21	25
Carbon tetrachloride	3.75	4.09	4.16	109	111	70.0-130			1.70	25
Heptane	3.75	3.95	4.01	105	107	70.0-130			1.51	25
Allyl Chloride	3.75	3.95	4.18	105	111	70.0-130			5.66	25
Tetrahydrofuran	3.75	3.98	4.08	106	109	70.0-137			2.48	25
2,2,4-Trimethylpentane	3.75	4.07	4.13	109	110	70.0-130			1.46	25
Vinyl Bromide	3.75	4.12	4.16	110	111	70.0-130			0.966	25
(S) 1,4-Bromofluorobenzene				95.9	95.2	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.

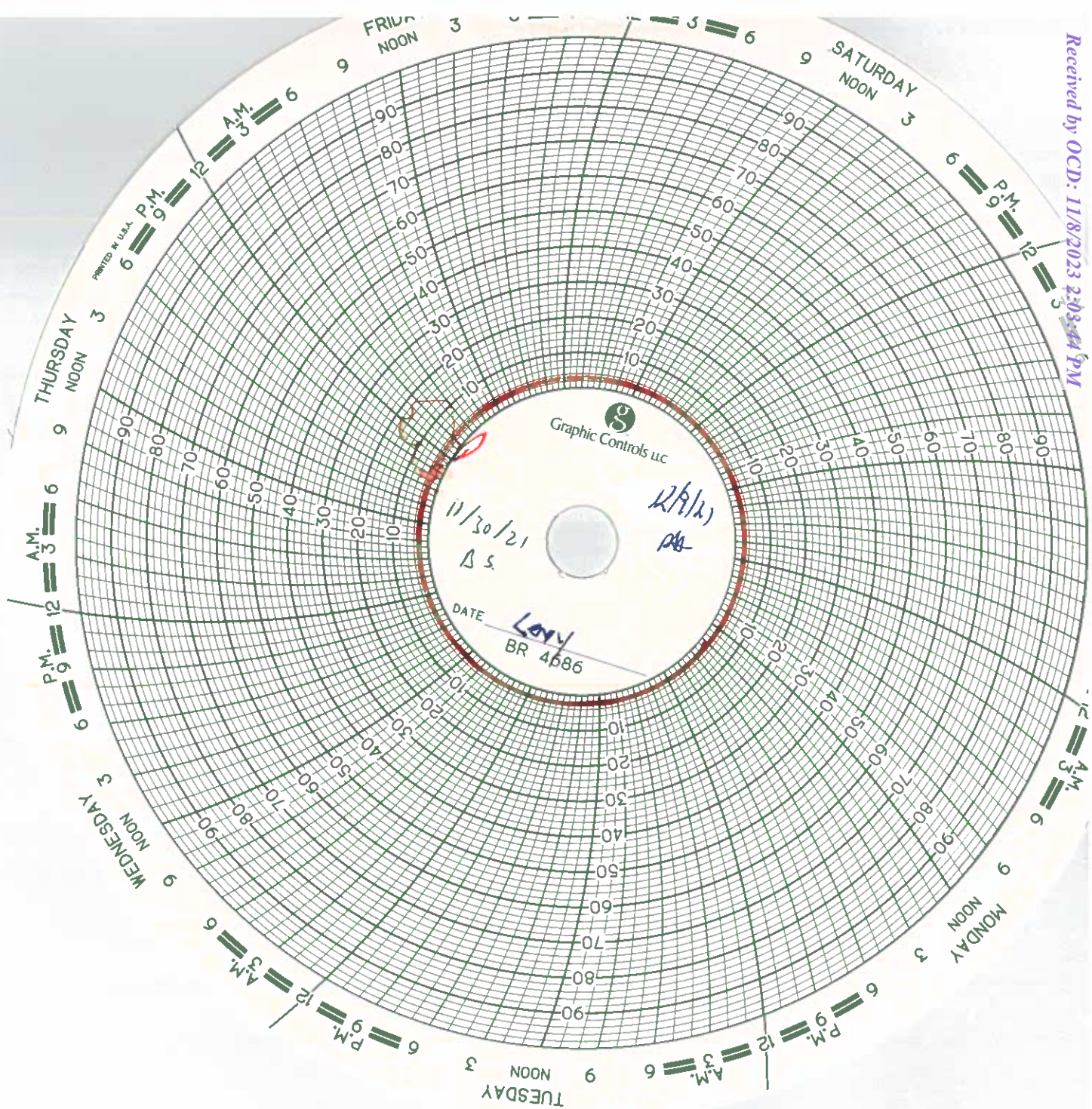


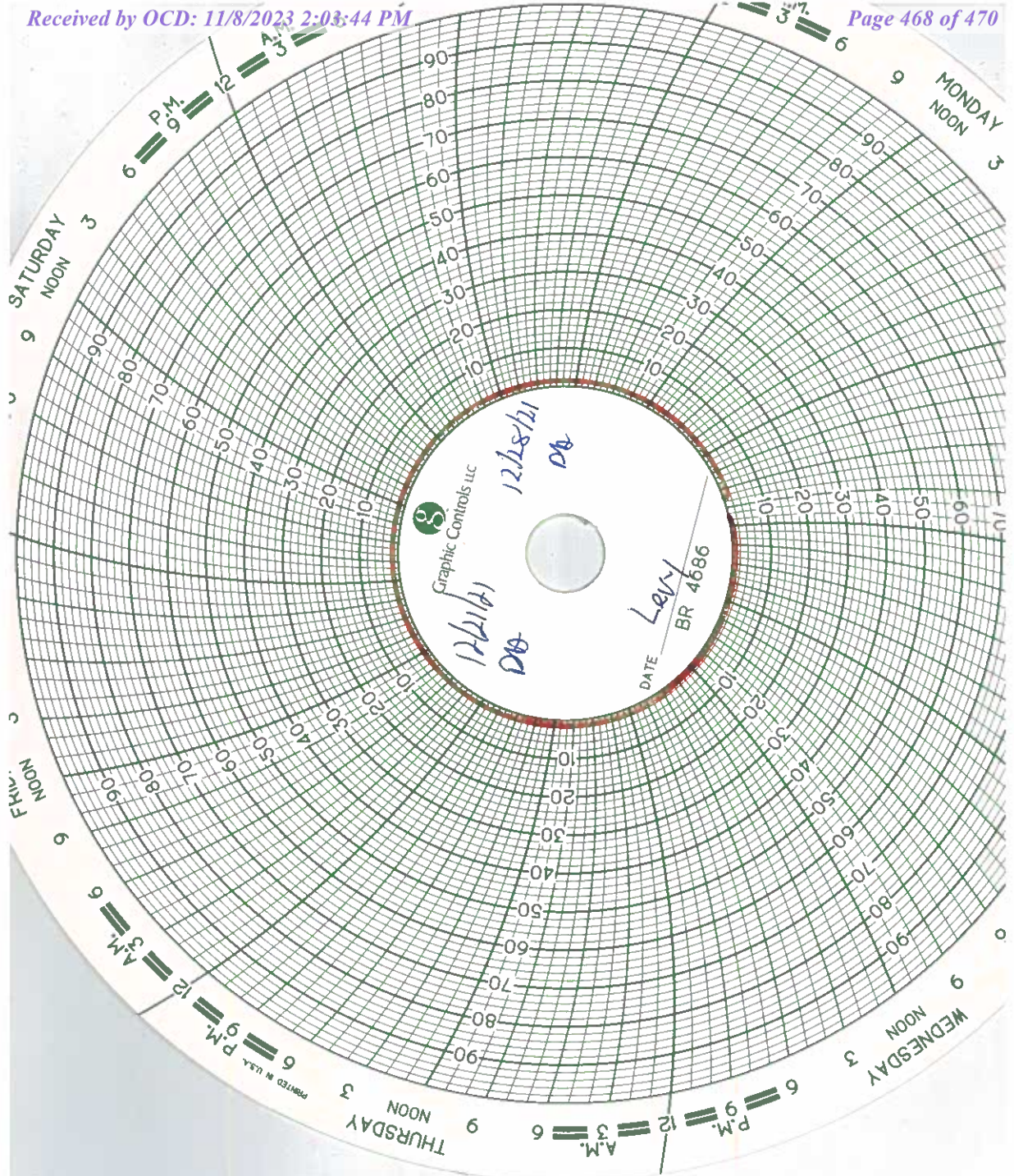
Released to Imaging: 1/2/2024 3:46:08 PM

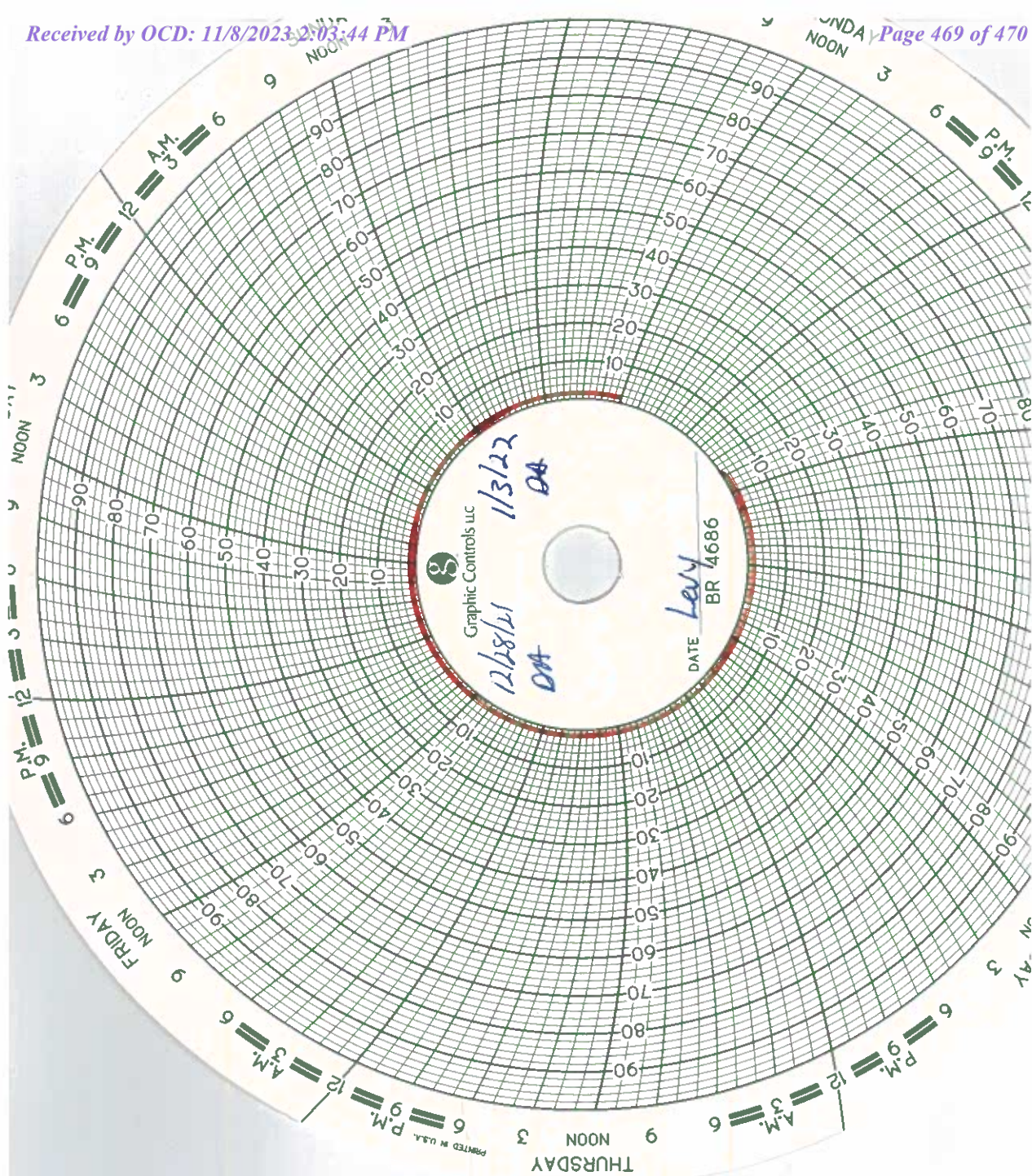


APPENDIX D

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 284009

CONDITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 284009
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	None	1/2/2024