REVIEWED

By Mike Buchanan at 11:02 am, Feb 21, 2025

2024 Annual Groundwater Monitoring Report WLSU #8 OCD Case No. 1RP-2457 Lea County, New Mexico

Prepared for Diamondback Energy Midland, Texas

Prepared by



6020 Academy NE, Suite 100 Albuquerque, New Mexico 87109 www.dbstephens.com DB22.1348

October 2, 2024

Review of the 2023
Annual Groundwater
Monitoring Report for
WLSU #8, content
satisfactory
1. Continue
groundwater
monitoring at the site

- monitoring at the site for chloride plume stability in all 9 wells as proposed.

 2. Confirm if chloride
- 2. Confirm if chloride remains confined to the east of WLSU 8.
- 3. Continue conduct groundwater monitoring on schedule as prescribed until all eight (8) consecutive quarterly sample results demonstrate below WQCC standards.
- 4. Submit the 2024 annual report to OCD, on or before October 2, 2025.



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1. Introduction

On behalf of Diamondback Energy, Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this report for an annual groundwater monitoring event at West Lovington Strawn Unit (WLSU) #8, located approximately 2.5 miles northwest of Lovington in Lea County, New Mexico (Figure 1). Groundwater monitoring was conducted at the site to provided continued characterization of chloride impacts to groundwater. Energen Resources Corporation (Energen), the former unit operator, discovered the impacts in 2009. The New Mexico Energy, Minerals and Natural Resources Department (NMEMNRD) Oil Conservation Division (OCD) case number for the site is 1RP-2457.

Groundwater monitoring consisted of water level measurement and water quality sampling at nine wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, and MW-9) on June 20 and 23, 2024. MW-7 through MW-9 are well nests with wells screened at different depths (Table 1). The project scope was based on the May 30, 2023 site characterization report (DBS&A, 2023). Water quality data demonstrate that the extent of chloride impacts to groundwater is limited to the area immediately east of WLSU #8.

Section 2 provides a physical description of the site, and summarizes its operational and investigative histories. Section 3 describes the groundwater monitoring activities conducted during the 2024 event. Sections 4 and 5 describe the groundwater gradient and flow velocity and water quality results, respectively, for this event. Section 6 presents the results of contaminant transport modeling. Concluding remarks are provided in Section 7.

2. Background

The following subsections describe the physical layout of the site and summarize its operational and groundwater investigative histories.

2.1 Physical Description

The site is located in Section 34, Township 15 South, Range 35 East in OCD unit letter 'L,' approximately 2.5 miles northwest of the city of Lovington, New Mexico. The site is situated on an approximately 2.4-acre footprint. The WLSU #8-R injection well is located near the center of the site (Figure 1). A battery of aboveground storage tanks (ASTs) is situated on the eastern



edge of the site. A network of aboveground pipe spans the site's perimeter, including permanent pipelines and flexible temporary tubing.

The WLSU #8 water well was located north of the tank battery near the northeast corner of the site (Figure 1). It was plugged and abandoned in 2015.

The site is constructed on Ogallala Formation, which is locally about 190 feet thick and predominantly composed of well-sorted, poorly to well-consolidated fine sand. A surficial layer of caliche is present throughout the site. It is 1.8 feet to more than 7.5 feet thick. The Ogallala Formation comprises the primary regional aquifer system in the area. It can be locally characterized as an unconfined aquifer with approximately 130 feet of saturated thickness based on site data. The water table is approximately 60 feet below ground surface (bgs). The Ogallala Formation locally overlies the Triassic Dockum Group, which behaves as an effective confining layer and base of the Ogallala Aquifer.

2.2 Operational History

The WLSU #8 well (formerly known as the Snyder F Com well) was initially drilled as a production well in 1994 (NMOCD, 1994). It was drilled to a depth of 11,872 feet bgs and into the Strawn Formation. The well is triple cased and cemented to the surface, including 391 feet of 13%-inch surface casing set in Class 3 cement.

In 2001, Energen became the unit operator of the West Lovington Strawn Unit and continued production of the WLSU #8 well. In 2006, the WLSU #8 well was sidetracked and recompleted from approximately 4,800 to 11,887 feet bgs due to downhole problems (NMOCD, 2006a). A pit was constructed at the northeast corner of the site immediately north of the former WLSU #8 water well location to support drilling operations. OCD approved the pit's closure on October 10, 2006 (NMOCD, 2006b). Energen ceased production at the site in 2008 and converted the WLSU #8 production well into an injection well for enhanced oil recovery. Injection operations commenced in January 2010, at which point the well was redesignated WLSU #8-R.

The WLSU #8 water well is believed to have been drilled in 1995 by an unknown driller (Terracon, 2016). Although a drilling application for the water well was submitted and approved by the Office of the State Engineer (OSE), the well was never registered (GST, 2013). The water well was plugged and abandoned in 2015.



2.3 Release Discovery and Response

In March 2009, Energen collected water quality samples from existing water wells in the WLSU #8 vicinity, as required by OCD before they could commence injection at WLSU #8-R. These wells included the Battery "A" water well, the WLSU #11 windmill, the WLSU #20 water well, and the WLSU #8 water well. Concentrations of all analytes sampled for were below the New Mexico Water Quality Control Commission (NMWQCC) standards numerated in Section 3103 of 20.6.2 NMAC (Section 3103 standards), with the exception of chloride concentration at the WLSU #8 water well. The chloride concentration at this well was 298 milligrams per liter (mg/L), just above the standard of 250 mg/L.

Energen submitted a release notification and corrective action form (C-141) to OCD on October 26, 2009 that outlined the discovery of the elevated chloride concentration at the WLSU #8 water well and requested permission to investigate the release (Appendix A). On December 22, 2009, Energen performed a pumping test at the WLSU #8 water well with permission from OCD (per Case No. 14356, Order No. R10448-E) and the Roswell District Office of the OSE. During the initial 10 days of pumping, 15,464 barrels of water was extracted, and the chloride concentration decreased from 3,692 to 1,420 mg/L, as documented in a January 11, 2010 e-mail from Andy Cobb to Larry Johnson (NMEMNRD) (Energen, 2010).

In 2012, Energen had five monitor wells installed at the site (MW-1 through MW-5) (Figure 1). Well logs are provided in Appendix B. Soil samples were collected from the boreholes for the monitor wells, and water quality samples were collected from the monitor wells after their construction (GST, 2013). The samples were submitted to Hall Environmental Analysis Laboratory, Inc. (HEAL) in Albuquerque, New Mexico. The soil and water quality samples were analyzed for chloride and hydrocarbon concentrations (volatile organic compounds [VOCs] and polycyclic aromatic hydrocarbons [PAHs]). The water quality samples were also analyzed for major ion and metal concentrations. The maximum soil chloride concentration was 63 milligrams per kilogram (mg/kg), recorded at MW-4 at 0 to 2 feet bgs. This concentration is well below the closure criteria of 10,000 mg/kg for soils where depth to groundwater is 51 to 100 feet bgs, as specified in 19.15.29.12 NMAC. With the exception of MW-2 and MW-4, water quality samples collected from the monitor wells were at background levels (less than 50 mg/L), and meet the Section 3103 standard for chloride. Chloride concentrations at MW-2 and MW-4 were 130 and 390 mg/L, respectively (Figure 2). Chloride was the only analyte detected at a concentration above a Section 3103 standard. GeoScience Technologies (GST, 2013) submitted a monitor well completion and initial site characterization report to OCD on May 29, 2013 documenting the monitor well installations.



On September 24, 2015, the WLSU #8 water well was plugged and abandoned, and MW-6 was installed approximately 10 feet east of the water well's former location. These activities were conducted in accordance with a proposal submitted to and approved by OCD (Terracon, 2015). The well log for MW-6 is provided in Appendix B. Soil samples were collected during the drilling of the borehole for MW-6 and were submitted to XENCO Laboratories, Inc. in Midland, Texas for analysis. The maximum soil chloride concentration was 14.5 mg/kg, measured at a depth of 5 feet bgs. Terracon (2017) documented the activities and laboratory analytical results in a report submitted to OCD on March 29, 2017. The report also provided results of 2016 quarterly groundwater monitoring. A similar monitoring report documenting quarterly 2017 quarterly groundwater monitoring was submitted to OCD on March 27, 2018 (Terracon, 2018). Water quality at MW-2 and MW-6 continually exceeded the Section 3103 standard for chloride between 2015 and 2018, while the water quality results at MW-4 exceeded it only once (Figure 2).

In September 2021, Energen had nested monitor wells MW-7, MW-8, and MW-9 installed upgradient and downgradient (Figure 1) of the site to further define the lateral and vertical extents of chloride impacts to groundwater. CMB Environmental and Geological Services, Inc. (CMB) provided oversight of the drilling and well construction activities. Water quality results from the nested monitor wells showed that chloride impacts to groundwater were limited to the area immediately east of WLSU #8 and that chloride concentrations at the site monitor wells were stable (DBS&A, 2023).

3. June 2024 Groundwater Monitoring

Groundwater monitoring activities included measurement of depth to water (Table 2), sampling, measurement of field parameters, quality assurance/quality control (QA/QC), and delivery of samples to the laboratory for analysis. Water quality samples were collected from all nine monitor wells. A survey report for the monitor wells is provided as Appendix C.

3.1 Well Purging and Field Parameters

The three nested monitor wells (MW-7, MW-8, and MW-9) were purged using a submersible pump and then sampled with disposable bailers. The other six wells (MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6) were bailed and sampled using disposable bailers. Each of the monitor wells was purged of three casing volumes of water before sampling, except for well MW-9S, which was purged of 2.5 casing volumes of water (Table 3).



During the purging process, field measurements of pH, specific conductance, and temperature were recorded. Final field water quality parameter values are reported in Table 3. These values were measured at the end of the purging process when sample were collected. No odors or unusual conditions were noted during purging.

The water produced during purging was placed in a trailer-mounted tank for off-site disposal.

3.2 Sample Collection

After purging each well, samples were collected for laboratory analysis. Samples for analysis were not field-filtered. Collected samples were placed immediately in an ice-filled cooler with chain-of-custody documentation and were delivered to the laboratory.

3.3 Laboratory Analytical Water Quality Parameters

Groundwater samples were analyzed for chloride, gasoline-range organics (GRO), diesel-range organics (DRO), motor oil range organics (MRO), and the volatile organic compounds benzene, ethylbenzene, toluene, and total xylenes (BTEX).

The water quality parameters measured during this event are listed in Tables 4a through 4i. These tables also provide the groundwater protection standards (GWPSs) and practical quantitation limits (PQLs) for each water quality parameter. The groundwater samples were analyzed by Eurofins Environment Testing (Eurofins) in Albuquerque, New Mexico. The completed field sheets and field notes are provided in Appendix D. The laboratory report is provided as Appendix E.

3.4 Quality Assurance/Quality Control

QA/QC samples were collected and tested during the groundwater monitoring. Each type of QA/QC samples is described briefly below:

- Field blank. A field blank sample was prepared by filling a complete sample set with deionized water in the field. The sample was analyzed for GRO and BTEX.
 - Field blank results. GRO and BTEX were not detected in the field blank.
- Field duplicate. Field duplicates samples are used to evaluate the precision of the field sampling and laboratory techniques. They are submitted "blind" to the laboratory, given different sample designations, and analyzed separately from the primary samples. EPA



guidance (U.S. EPA, 1990) recommends collection of field duplicates at a minimum frequency of 10 percent during each sampling event. A field duplicate sample was collected from monitor well MW-7S in parallel with the primary water quality sample using the same container type and sampling technique as the primary sample. The field duplicate sample was submitted to the laboratory as a separate sample labeled "MW-7 Shallow Duplicate."

Field duplicate results. The field duplicate sample results closely match the results for MW-7S (Table 5). These results indicate good laboratory precision.

• Matrix spike and matrix spike duplicates. Matrix spike/matrix spike duplicate (MS/MSD) analyses are performed on additional sample volumes to which the laboratory adds (spikes) appropriate analyte(s) at concentrations between 10 and 50 times the method detection limits. The results of the MS/MSD analyses are used to determine laboratory accuracy and precision and to determine if any matrix interferences exist. MS/MSD analyses are standard laboratory procedures that are independent of the environmental samples collected in the field. The results of the MS/MSD analyses are reported in the Eurofins laboratory report in Appendix E.

Matrix spike and matrix spike duplicate results. The laboratory report (Appendix E) includes a QA/QC summary report. The results indicate that the laboratory's QA/QC criteria have been met.

3.5 Equipment Decontamination and Maintenance

Thorough decontamination of all non-disposable sampling equipment was conducted before each day's sampling and before sampling of each well to prevent cross-contamination of samples collected in the field. This equipment included the water level sounder, water quality field parameter probe, and submersible pump used for well purging. All other sampling equipment was dedicated. Decontamination procedures were as follows:

- Equipment was washed in a solution of non-phosphate detergent (Liquinox) and distilled/ deionized water. All surfaces that could come in direct contact with the samples were washed in a clean plastic tub, using a scrub brush to mechanically remove any loose particles.
- Equipment was rinsed twice with distilled/deionized water.
- Equipment was dried before use to the extent practicable.
- Clean latex gloves were worn during all washing and rinsing operations.





3.6 Instrument Calibration and Frequency

Field instruments were calibrated to ensure that reliable data were generated. The only field instrument used during sampling at site was a Hanna Instruments multiparameter meter probe that can test pH, electrical conductivity, and temperature. Complete procedures for operating, maintaining, and calibrating the instrument are contained in the manufacturer's instruction manual.

3.7 Sample Handling and Chain of Custody

Samples collected for laboratory analysis were transported in ice chests to Eurofins. Sample bottles were sealed in clear plastic bags and placed in coolers on bags of ice to cool the samples to 4°C for storage and transportation. Plastic bubble pack was used to prevent breakage of fragile sample bottles. All samples arrived intact, and holding time requirements were met.

Sample bottles were checked in advance of sampling and tagged with an adhesive label containing the following information (applied using waterproof ink): designated sample identification and type of analysis requested. In the field, the sampling date and time and the initials of the sampler were added.

For analytical data to be valid, samples must be traceable from the time of collection through chemical analysis and final disposition. A chain of custody form obtained from the laboratory was used for this purpose. The chain of custody form is included with the laboratory report in Appendix E.

4. Groundwater Flow Direction and Velocity

Figure 3 provides a time-series graph of water level elevations over time. Figure 4 is a potentiometric surface map constructed from June 2024 water level measurements. The water level data presented in the potentiometric surface map show that the groundwater gradient is toward the east-southeast at 0.0034 foot per foot (ft/ft). This groundwater flow direction and gradient are consistent with those of the previous monitoring event that was conducted in 2022 (DBS&A, 2023).

The average linear groundwater flow velocity was calculated using Darcy's Law, as follows:

$$v = \frac{K}{n_e} \frac{(h_1 - h_2)}{l} \tag{1}$$



where v = average linear velocity (feet per day [ft/d])

K = hydraulic conductivity (ft/d)

n_e = effective porosity (dimensionless)

h₂ = hydraulic head (elevation) downgradient (feet)

 h_1 = hydraulic head (elevation) upgradient (feet)

 $I = distance between h_1 and h_2 (feet)$

The hydraulic gradient is 0.0034 ft/ft based on the June 2024 potentiometric surface map (Figure 4). The hydraulic conductivity (K) of 22 feet per day (ft/d) and effective porosity (n_e) of 0.25 are taken from the OSE's groundwater model for Lea County (Musharrafieh and Chudnoff, 1999). Based on these parameter values, the calculated groundwater flow velocity is 0.3 ft/d (110 feet per year [ft/yr]). The hydraulic conductivity of the Ogallala Aquifer is variable, and the average linear groundwater flow velocity could be lower, or as high as several feet per day.

5. Water Quality Results

Chloride concentrations in regional groundwater have historically been elevated in the area of the former location of the WLSU #8 water well (i.e., at MW-2 and MW-6). The chloride concentration at MW-4 has also occasionally exceeded the Section 3103 standard for chloride, with concentrations ranging from 123 to 390 mg/L (Figure 2). Figure 5 shows the current vertical and horizontal distributions of chloride at the site. Wells MW-2 and MW-6 are the only wells with chloride concentrations above the Section 3103 standard of 250 mg/L. These two wells are located immediately downgradient of the former location of the WLSU #8 water well. MW-2 and MW-6 are approximately 120 feet southeast and 10 feet east, respectively, of the former location of the WLSU #8 water well. The chloride concentration at MW-4 is typically around the Section 3103 standard, and was 140 mg/L in June 2024. Well MW-4 is approximately 225 feet south-southeast of the former location of the WLSU #8 water well.

The chloride concentrations at the WLSU #8 site monitor wells appear stable with the exception of the chloride concentration at MW-7 (Figure 2). Chloride concentration at MW-7 exhibits an increasing trend over the well's short history. It increased from 56 to 69 mg/L at MW-7S and from 52 to 73 mg/L at MW-7D. The MW-7 monitor well nest is located downgradient MW-2, where chloride concentration is greatest (Figure 5). The increase is likely due to the movement of chloride-impacted groundwater to the southeast. Although chloride concentration at MW-7



remains below the Section 3103 standard, if it continues to increase, additional characterization or implementation of corrective action (e.g., groundwater pumping) may be needed.

The chloride concentrations of the June 2024 water quality samples collected at the three nested monitor wells are similar for each location (Figure 5). For instance, the chloride concentrations at MW-8 were 23 mg/L (shallow), 24 mg/L (middle), and 29 mg/L (deep). Similar trends were seen at MW-7 and MW-9 (Figure 5). These water quality data demonstrate that density stratification of chloride is not present.

The calculated average linear groundwater flow velocity is 0.3 ft/d (110 ft/yr) (Section 4). Based on this velocity, groundwater impacts from the former location of the WLSU #8 water well should have reached MW-7 by now. Chloride is a conservative ion, meaning that it typically does not interact with other dissolved ions or aquifer materials, and therefore travels at about the same rate as groundwater. MW-7 is 690 feet southeast (downgradient) of the former WLSU #8 water well location, where elevated chloride concentrations were first observed in 2009. Given the distance to MW-7 (690 feet) and flow velocity (110 ft/yr), chloride-impacted groundwater should have reached MW-7 in approximately 6 years (by 2016). Chloride concentration at MW-7 is increasing. The increase is likely due to the movement of chloride-impacted groundwater to the southeast and appears to be slightly above background levels (i.e., less than 50 mg/L) this event. Chloride-impacted groundwater is diluted through mixing (i.e., diffusion and dispersion) before reaching MW-7 and remains below Section 3103 standard for chloride.

6. Advection-Dispersion Modeling

DBS&A simulated the transport of chloride-impacted groundwater in the WLSU #8 vicinity using ATRANS-EXCEL (ATRANS). ATRANS is a three-dimensional advection dispersion model that uses analytical transport solutions to determine the concentration of dissolved constituents across time and distance away from a source (S.S. Papadopulos, 2016). It can be used to consider advection, dispersion, sorption, and first-order transformation reaction processes, and assumes that groundwater flow is steady and uniform. DBS&A used ATRANS to evaluate the degree to which elevated chloride concentrations could become naturally diluted as groundwater travels away from the former location of the WLSU #8 water well.

DBS&A parameterized the ATRANS model using the same hydraulic properties as the calculation of the average linear groundwater flow velocity (Section 4): (1) hydraulic conductivity of 22 ft/d,



(2) effective porosity of 0.25, and (3) hydraulic gradient to the southeast at 0.0034 ft/ft. The model domain was set at 2,000 square-feet with 800 cells. Longitudinal, transverse, and vertical dispersity values were assigned values of 100, 10, and 0.1 feet. The effective diffusion coefficient was set to zero. The chloride source was simulated as a two-dimensional rectangular patch placed near the former location of the WLSU #8 water well location (20 feet wide and 5 feet deep) with a constant chloride concentration of 2,500 mg/L. The model was run at 1-year timesteps until a steady-state condition was achieved.

ATRANS simulated results are presented in Figure 6. Steady-state conditions are achieved at the site within 10 years. The simulated results show that dispersion effectively dilutes chloride concentrations to less than 250 mg/L 260 feet downgradient of the source, and to background levels 1,300 feet downgradient of the source (Figure 6). The ATRANS simulated results generally agree with observed chloride concentrations.

Despite some uncertainty about the timing and extent of the chloride release at the WLSU #8 site, the ATRANS simulated results demonstrate that elevated chloride concentrations are attenuated by dispersion to background levels within about a thousand feet of the site.

7. Conclusions and Recommendation

In March 2009, Energen (the former WLSU #8 operator) sampled several water wells in the vicinity of the WLSU #8 site. Chloride was detected at the WLSU #8 water well at a concentration of 298 mg/L, above the Section 3103 standard of 250 mg/L. Energen submitted a C-141 form to OCD in October 2009 notifying them of the elevated chloride concentration at the WLSU #8 water well. Since the discovery of the elevated chloride concentration, Energen has installed a total of nine monitor wells at the site. Five monitor wells were installed in 2012 (MW-1 through MW-5), one monitor well was installed in 2016 (MW-6), and three monitor well nests were installed in 2021 (MW-7 through MW-9). The WLSU #8 water well was plugged and abandoned in 2015.

The site's monitor wells were sampled in June 2024. Water quality at the wells show that chloride impacts to groundwater are limited to the area immediately east of the WLSU #8 site (Figure 5). Wells MW-2 and MW-6 were the only wells in June 2024 with water quality results that exceed the Section 3103 standard for chloride. Chloride concentrations at downgradient monitor wells MW-7 and MW-8 met the Section 3103 standard for chloride. This includes each of the screened intervals of monitor well nests MW-7 and MW-8.



Chloride concentrations at the site's monitor wells appear stable with the exception of the increasing trend observed at MW-7 (Figure 2). The increase is likely due to the movement of chloride-impacted groundwater to the southeast. The chloride concentration at MW-7 remains below the Section 3103 standard for chloride. If the concentration continues to increase addition characterization or implementation of corrective action (e.g., groundwater pumping) may be needed.

DBS&A recommends continued annual groundwater monitoring at the nine site wells to help confirm that the chloride plume remains limited to the area immediately east of the WLSU #8 site and is not migrating further from the site.

References

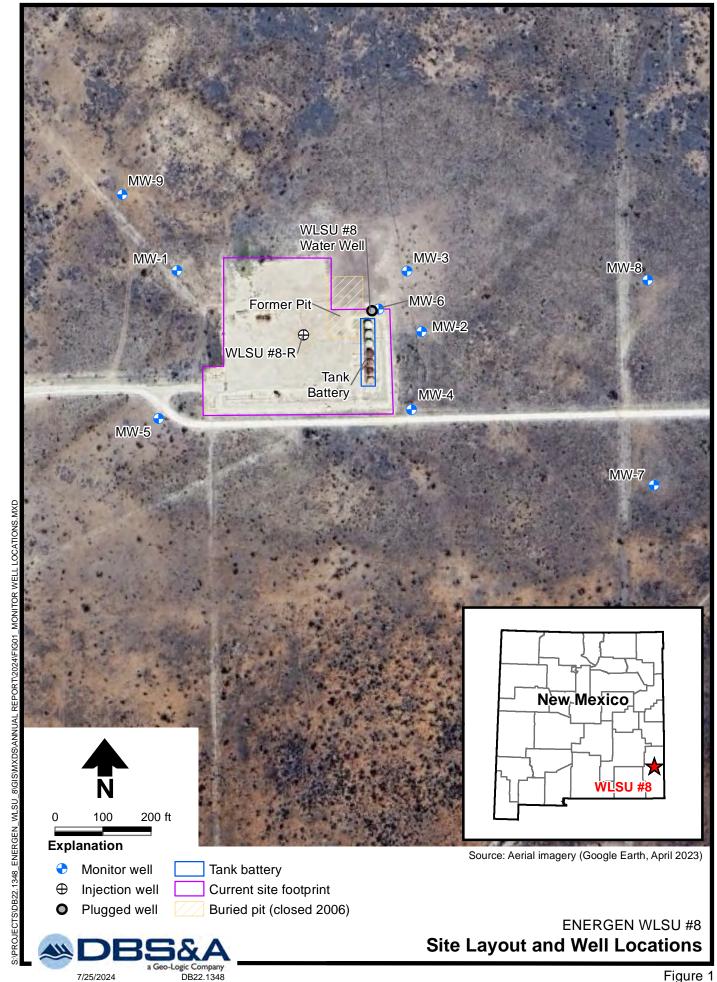
- Daniel B. Stephens & Associates, Inc. (DBS&A). 2023. *Site characterization report, WLSU #8, OCD Case No. 1RP-2457, Lea County, New Mexico*. Prepared for Energen Resources Corporation, Midland, Texas. May 30, 2023.
- Energen Resources Corporation (Energen). 2010. E-mail from Andy Cobb to Larry Johnson, Energy, Minerals and Natural Resources Department, regarding Water well sampling. January 11, 2010.
- GeoScience Technologies (GST). 2013. Geological and hydrogeological evaluation of borings and monitor wells at and around Energen Energy Corporation, Well #8-R West Lovington Strawn Unit, API 30-025-32291, 1980' FSL & 600' FWL, Section 34, Township 15 South, Range 35 East, Lea County, New Mexico. Prepared for Energen Resources Corporation, Midland, Texas. May 29, 2013.
- Musharrafieh, G. and M. Chudnoff. 1999. *Numerical simulation of groundwater flow for water rights administration in the Lea County underground water basin New Mexico*. New Mexico Office of the State Engineer Technical Report 99-1. January 1999.
- New Mexico Oil Conservation Division (NMOCD). 1994. Well completion report and log for oil well installed by Charles B. Gillespie, Jr., Unit Letter L: 1980 feet from the south line and 660 feet from the west line, Section 34, Township 15-S, Range 35-E, Lea County. Well API No. 30-025-32291. March 25, 1994.

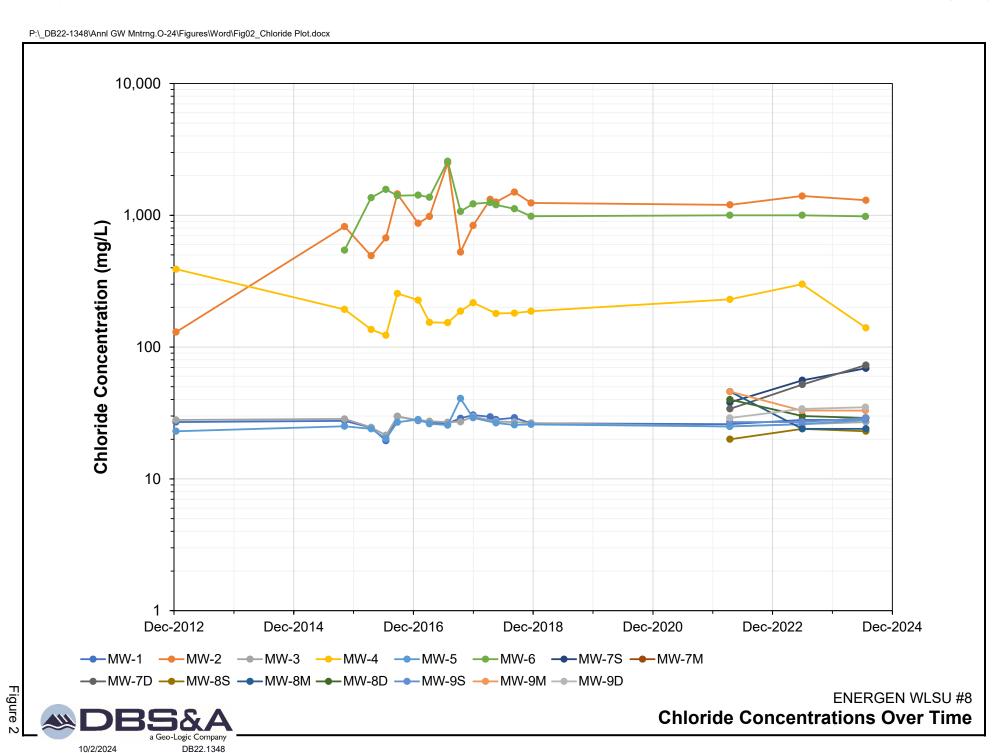


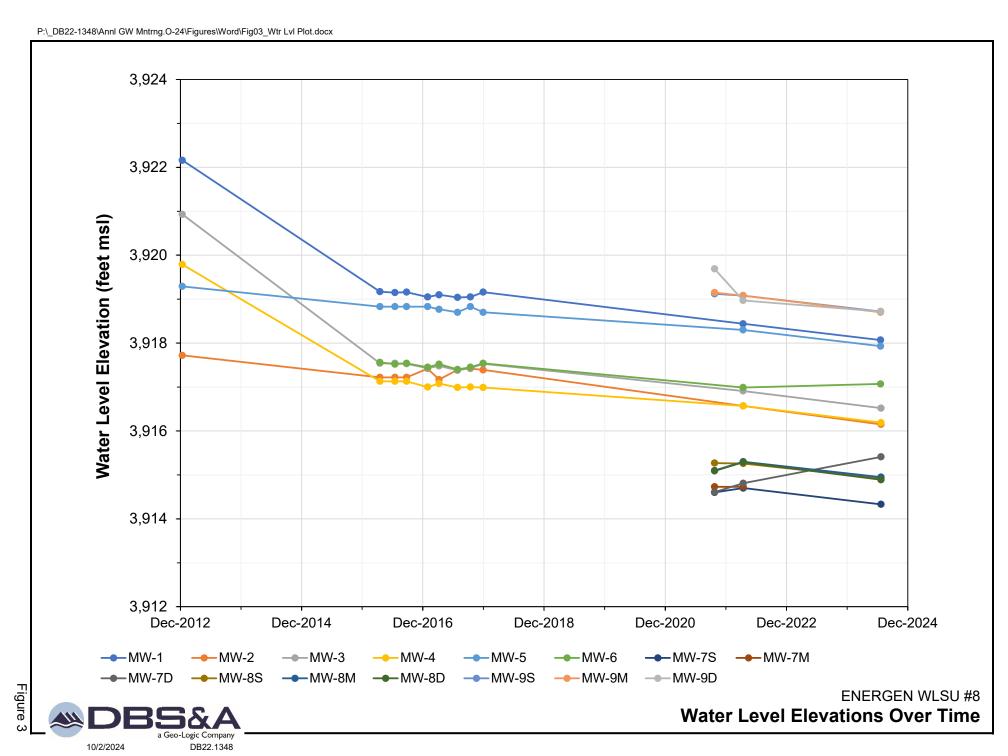
- NMOCD. 2006a. Sundry notices and reports on wells for oil well operated by Energen Resources Corporation, Unit Letter L: 1980 feet from the south line and 660 feet from the west line, Section 34, Township 15S, Range 35E, Lea County. Well API No. 30-025-32291. August 7, 2006.
- NMOCD. 2006b. Pit or below-grade tank registration or closure form for WLSU 8R, operated by Energen Resources Corp. Well API No. 30-025-32291. October 10, 2006.
- S.S. Papadopulos & Associates, Inc. (S.S. Papadopulos). 2016. *ATRANS-EXCEL version 1.10*. July 4, 2016.
- Terracon Consultants, Inc. (Terracon). 2015. Limited groundwater investigation proposal, West Lovington Strawn Unit #8, NMOCD Reference No. 1RP-2457, Unit Letter "L", Section 34, Township 15 South, Range 35 East, Lea County, New Mexico. Prepared for Energen Resources Corp., Midland, Texas. Terracon Project No. AR157026. August 3, 2015.
- Terracon. 2016. Limited groundwater investigation summary and proposed activities, West Lovington Strawn Unit #8, NMOCD Reference No. 1RP-2457, Unit Letter "L", Section 34, Township 15 South, Range 35 East, Lea County, New Mexico. Prepared for Energen Resources Corp., Midland, Texas. Terracon Project No. AR157026. March 9, 2016.
- Terracon. 2017. 2016 Annual groundwater monitoring report, West Lovington Strawn Unit #8, Lea County, New Mexico. Prepared for Energen Resources Corporation, Midland, Texas. Terracon Project No. AR157026. March 29, 2017.
- Terracon. 2018. 2017 Annual groundwater monitoring report, West Lovington Strawn Unit #8, Lea County, New Mexico. Prepared for Energen Resources Corporation, Midland, Texas. Terracon Project No. AR157026. March 27, 2018.
- U.S. Environmental Protection Agency (EPA). 1990. *Preparation of a U.S. EPA Region 9 field sampling plan for private and state-lead Superfund projects*. Quality Assurance Management Section. April 1990.

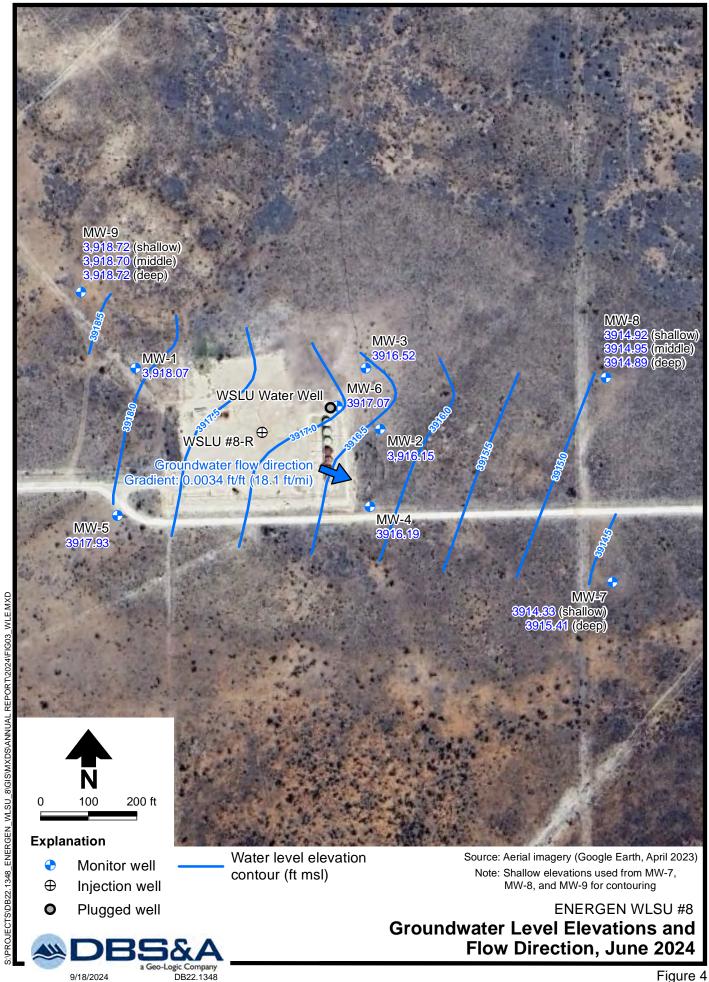
Figures



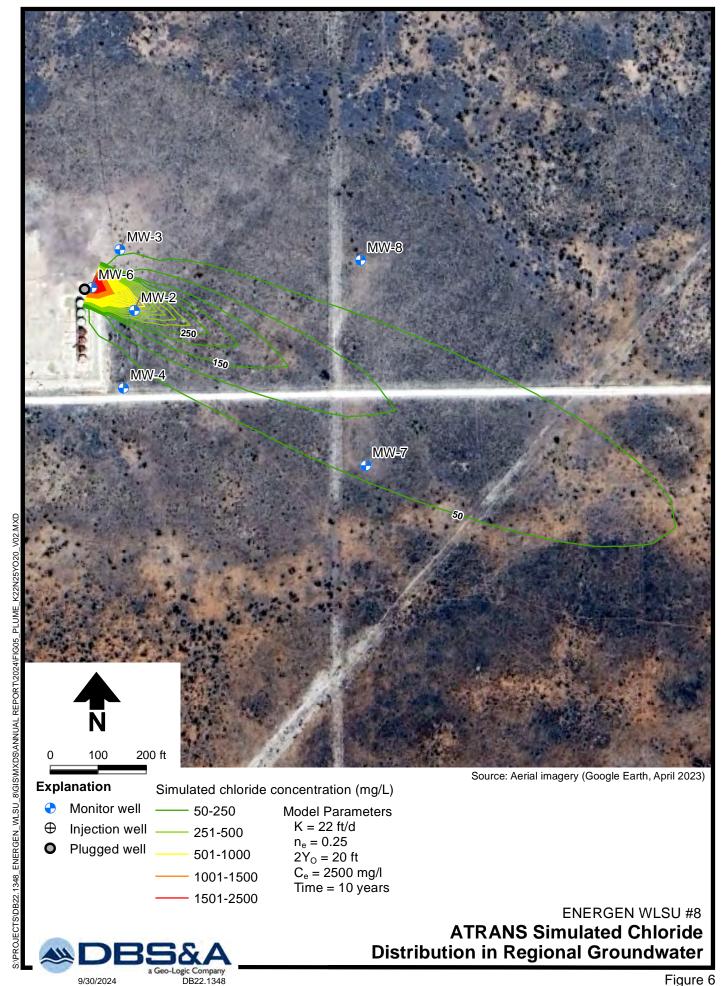












Tables







Table 1. Monitor Well Construction Information

Well ID	OSE Permit No.	Completion Date	Northing ^a (feet)	Easting ^a (feet)	Ground Surface Elevation ^b (feet msl)	Top of Casing Elevation ^a (feet msl)	Total Borehole Depth (feet bgs)	Total Well Depth (feet bgs)	Screened Interval (feet
			, ,		, ,	, ,		<u> </u>	bgs)
MW-1	L-13218-POD1	12/12/2012	718754.5	826775.5	3,973.05	3,975.52	71	69.6	49–69
MW-2	L-13218-POD2	12/12/2012	718624.4	827284.4	3,972.55	3,974.76	70	69.6	49.6–69.6
MW-3	L-13218-POD3	12/12/2012	718751.1	827254.9	3,973.86	3,976.67	73	71.5	51–71
MW-4	L-13218-POD5	12/13/2012	718462.6	827262.2	3,971.80	3,974.52	73	70.2	49.7–69.7
MW-5	L-13218-POD4	12/13/2012	718446.9	826735.6	3,971.78	3,974.43	71	68	47.5–67.5
MW-6	L-13218-POD6	9/14/2015	718672.3	827195.6	3,972.74	3,976.17	70	70	50–70
MW-7S	L-15194-POD1	9/22/2021	718301.7	827766.4	3,969.65	3,969.45	197.5	72	50–70
MW-7M						3,969.43		143	126–141
MW-7D						3,969.41		190.5	173.5–188.5
MW-8S	L-15194-POD2	9/18/2021	718728.7	827755.9	3,969.75	3,969.47	197.5	72	50–70
MW-8M						3,969.30		146.5	129.5–144.5
MW-8D						3,969.29		193.5	176.5–191.5
MW-9S	L-15194-POD3	9/14/2021	718914.0	826662.6	3,972.15	3,971.80	197.5	72	50–70
MW-9M						3,971.85		145	128–143
MW-9D						3,971.82		192	175–190

^a NAD 1998 Vertical Datum.

OSE = Office of the State Engineer

msl = Above mean sea level

bgs = Below ground surface

^b NAD 1983 - New Mexico East Zone.



Table 2. 2024 Water Level Measurements

Well ID	Top of Cas Elevation Well ID Date (feet ms		Depth to Water (feet btoc)	Water Level Elevation (feet msl)
MW-1	6/20/2024	3,975.52	57.45	3,918.07
MW-2	6/23/2024	3,974.76	58.61	3,916.15
MW-3	6/23/2024	3,976.67	60.15	3,916.52
MW-4	6/23/2024	3,974.52	58.33	3,916.19
MW-5	6/20/2024	3,974.43	56.50	3,917.93
MW-6	6/20/2024	3,976.17	59.10	3,917.07
MW-7S	6/23/2024	3,969.45	55.12	3,914.33
MW-7M ^b	6/23/2024	3,969.43	_	_
MW-7D	6/23/2024	3,969.41	54.00	3,915.41
MW-8S	6/23/2024	3,969.47	54.55	3,914.92
MW-8M	6/23/2024	3,969.30	54.35	3,914.95
MW-8D	6/23/2024	3,969.29	54.40	3,914.89
MW-9S	6/20/2024	3,971.80	53.08	3,918.72
MW-9M	6/20/2024	3,971.85	53.15	3,918.70
MW-9D	6/20/2024	3,971.82	53.10	3,918.72

^a NAD 1998 Vertical Datum.

msl = Above mean sea level

btoc = Below top of casing

^b This well was damaged by the driller. Casing blocked/collapsed at 46.30 feet from top of casing.



Table 3. 2024 Field Water Quality Parameters

Well ID	Sample Date	Purge Volume (gallons)	Temperature (°C)	Conductance (µS/cm)	pH (s.u.)
MW-1	6/20/2024	6.75	19.61	632	7.32
MW-2	6/23/2024	6.50	19.59	4,719	7.36
MW-3	6/23/2024	6.75	19.60	648	7.33
MW-4	6/23/2024	7.00	19.72	1,046	7.30
MW-5	6/20/2024	6.75	18.97	614	7.37
MW-6	6/20/2024	7.00	19.60	3,997	7.56
MW-7S	6/23/2024	8.00	20.05	807	7.41
MW-7D	6/23/2024	60.0	20.95	770	7.73
MW-8S	6/23/2024	10.0	21.55	582	7.43
MW-8M	6/23/2024	45.0	21.13	585	7.47
MW-8D	6/23/2024	67.0	22.13	647	7.52
MW-9S	6/20/2024	10.0	19.70	642	7.46
MW-9M	6/20/2024	45.0	19.50	569	7.61
MW-9D	6/20/2024	67.0	20.21	577	7.56

[°]C = Degrees Celsius

 $[\]mu$ S/cm = Microsiemens per centimeter





Table 4a. 2024 Analytical Results, Monitor Well MW-1

	Concentration (mg/L ^a)				
	20.9.9.20 NMAC		MW-1		
Parameter	Standard	PQL	(6/20/2024)		
General Chemistry					
Chloride	250	10	28		
Gasoline and Diesel Range Organics					
Gasoline-range organics [C6-C10]	NS	0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	<5.0		
Volatile Organic Compounds (μg/L)					
Benzene	5	1.0	<1.0		
Ethylbenzene	700	1.0	<1.0		
Toluene	1,000	1.0	<1.0		
Total xylenes	620	1.5	<1.5		

^a Unless otherwise noted.

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit





Table 4b. 2024 Analytical Results, Monitor Well MW-2

	Concentration (mg/L ^a)				
	20.9.9.20 NMAC		MW-2		
Parameter	Standard	PQL	(6/23/2024)		
General Chemistry					
Chloride	250	10	1,300		
Gasoline and Diesel Range Organics					
Gasoline-range organics [C6-C10]	NS	0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	<5.0		
Volatile Organic Compounds (μg/L)					
Benzene	5	1.0	<1.0		
Ethylbenzene	700	1.0	<1.0		
Toluene	1,000	1.0	<1.0		
Total xylenes	620	1.5	<1.5		

Bold indicates that value exceeds the standard.

mg/L = Milligrams per liter

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit

^a Unless otherwise noted.





Table 4c. 2024 Analytical Results, Monitor Well MW-3

	Concentration (mg/L ^a)				
	20.9.9.20 NMAC		MW-3		
Parameter	Standard	PQL	(6/23/2024)		
General Chemistry					
Chloride	250	10	27		
Gasoline and Diesel Range Organics					
Gasoline-range organics [C6-C10]	NS	0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	<5.0		
Volatile Organic Compounds (μg/L)					
Benzene	5	1.0	<1.0		
Ethylbenzene	700	1.0	<1.0		
Toluene	1,000	1.0	<1.0		
Total xylenes	620	1.5	<1.5		

^a Unless otherwise noted.

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit





Table 4d. 2024 Analytical Results, Monitor Well MW-4

	Concentration (mg/L ^a)				
	20.9.9.20 NMAC		MW-4		
Parameter	Standard	PQL	(6/23/2024)		
General Chemistry					
Chloride	250	10	140		
Gasoline and Diesel Range Organics					
Gasoline-range organics [C6-C10]	NS	0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	<5.0		
Volatile Organic Compounds (μg/L)					
Benzene	5	1.0	<1.0		
Ethylbenzene	700	1.0	<1.0		
Toluene	1,000	1.0	<1.0		
Total xylenes	620	1.5	<1.5		

^a Unless otherwise noted.

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit





Table 4e. 2024 Analytical Results, Monitor Well MW-5

	Concentration (mg/L ^a)				
	20.9.9.20 NMAC		MW-5		
Parameter	Standard	PQL	(6/20/2024)		
General Chemistry					
Chloride	250	10	28		
Gasoline and Diesel Range Organics					
Gasoline-range organics [C6-C10]	NS	0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	<5.0		
Volatile Organic Compounds (μg/L)					
Benzene	5	1.0	<1.0		
Ethylbenzene	700	1.0	<1.0		
Toluene	1,000	1.0	<1.0		
Total xylenes	620	1.5	<1.5		

^a Unless otherwise noted.

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit





Table 4f. 2024 Analytical Results, Monitor Well MW-6

	Concentration (mg/L ^a)				
	20.9.9.20 NMAC		MW-6		
Parameter	Standard	PQL	(6/20/2024)		
General Chemistry					
Chloride	250	10	980		
Gasoline and Diesel Range Organics					
Gasoline-range organics [C6-C10]	NS	0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	<5.0		
Volatile Organic Compounds (μg/L)					
Benzene	5	1.0	<1.0		
Ethylbenzene	700	1.0	<1.0		
Toluene	1,000	1.0	<1.0		
Total xylenes	620	1.5	<1.5		

Bold indicates that value exceeds the standard.

mg/L = Milligrams per liter

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit

^a Unless otherwise noted.





Table 4g. 2024 Analytical Results, Monitor Well MW-7

	Concentration (mg/L ^a)					
Parameter	20.9.9.20 NMAC Standard	PQL	MW-7S (6/23/2024)	MW-7D (6/23/2024)		
General Chemistry						
Chloride	250	10	69	73		
Gasoline and Diesel Range Organics						
Gasoline-range organics [C6-C10]	NS	0.050	<0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	< 5.0	<5.0		
Volatile Organic Compounds (μg/L)						
Benzene	5	1.0	<1.0	<1.0		
Ethylbenzene	700	1.0	<1.0	<1.0		
Toluene	1,000	1.0	<1.0	<1.0		
Total xylenes	620	1.5	<1.5	<1.5		

^a Unless otherwise noted.

mg/L = Milligrams per liter

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit



Table 4h. 2024 Analytical Results, Monitor Well MW-8

	Concentration (mg/L ^a)					
Parameter	20.9.9.20 NMAC Standard	PQL	MW-8S (6/23/2024)	MW-8M (6/23/2024)	MW-8D (6/23/2024)	
General Chemistry						
Chloride	250	10	23	24	29	
Gasoline and Diesel Range Organics						
Gasoline-range organics [C6-C10]	NS	0.050	<0.050	<0.050	< 0.050	
Diesel-range organics [C10-C28]	NS	1.0	<1.0	<1.0	<1.0	
Motor oil range organics [C28-C40]	NS	5.0	<5.0	<5.0	< 5.0	
Volatile Organic Compounds (μg/L)						
Benzene	5	1.0	<1.0	<1.0	<1.0	
Ethylbenzene	700	1.0	<1.0	<1.0	<1.0	
Toluene	1,000	1.0	<1.0	<1.0	<1.0	
Total xylenes	620	1.5	<1.5	<1.5	<1.5	

^a Unless otherwise noted.

mg/L = Milligrams per liter

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit





Table 4i. 2024 Analytical Results, Monitor Well MW-9

	Concentration (mg/L ^a)						
	20.9.9.20 NMAC		MW-9S	MW-9M	MW-9D		
Parameter	Standard	PQL	(6/20/2024)	(6/20/2024)	(6/20/2024)		
General Chemistry							
Chloride	250	10	29	33	35		
Gasoline and Diesel Range Organics							
Gasoline-range organics [C6-C10]	NS	0.050	<0.050	<0.050	<0.050		
Diesel-range organics [C10-C28]	NS	1.0	<1.0	<1.0	<1.0		
Motor oil range organics [C28-C40]	NS	5.0	<5.0	<5.0	< 5.0		
Volatile Organic Compounds (μg/L)							
Benzene	5	1.0	<1.0	<1.0	<1.0		
Ethylbenzene	700	1.0	<1.0	<1.0	<1.0		
Toluene	1,000	1.0	<1.0	<1.0	<1.0		
Total xylenes	620	1.5	<1.5	<1.5	<1.5		

^a Unless otherwise noted.

 μ g/L = Micrograms per liter

PQL = Practical quantitation limit





Table 5. Comparison of 2024 Quality Assurance Duplicate Analytical Results

	Concentration (mg/L ^a)						
Analyte	20.9.9.20 NMAC Standard	MW-7S	Duplicate	RPD ^b (%)			
General Chemistry							
Chloride	250	69	75	8.3			
Gasoline and Diesel Range Organics							
Gasoline-range organics [C6-C10]	NS	<0.050	<0.050	0			
Diesel-range organics [C10-C28]	NS	<1.0	<1.0	0			
Motor oil range organics [C28-C40]	NS	< 5.0	< 5.0	0			
Volatile Organic Compounds (μg/L)							
Benzene	5	<1.0	<1.0	0			
Ethylbenzene	700	<1.0	<1.0	0			
Toluene	1,000	<1.0	<1.0	0			
Total xylenes	620	<1.5	<1.5	0			

^a Unless otherwise noted.

$$RPD = \frac{\left|A - B\right|}{\left(A + B\right)/2} \times 100\% \quad \text{where A = first duplicate concentration (the reporting limit if non-detect), B = second duplicate concentration (the reporting limit if non-detect)}$$

 μ g/L = Micrograms per liter

^b Relative percent difference (RPD) is calculated as follows:

Appendix A C-141 Forms



Form C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Revised October 10, 2003 Submit 2 Copies to appropriate

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

IRP#10.3.2457

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505 Release Notification and Corrective Action Initial Report **OPERATOR** Final Report Name of Company: Energen Resources Corporation Contact: Andrew Cobb Address: 3300 North A St. Bldg.4, Ste. 100 Midland, Tx. 79705 Telephone No.432-687-1155 Facility Type: Fresh Water Well @ WLSU #8 well 30.025.3229 Facility Name: West Lovington Strawn Unit Mineral Owner: N/A Surface Owner: Dan Field Lease No. N/A API LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County FNL 34 15S 35E 1980 660 FWI. Lea WIRSS! Latitude 32° 58'19.1" Longitude 103° 24' 06.5" NATURE OF RELEASE Type of Release: Unknown Volume of Release Volume Recovered Date and Hour of Occurrence Source of Release Date and Hour of Discovery Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ No ☐ Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ☐ No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Sampling of fresh water well near the WLSU #8 well shows elevated chloride levels. Describe Area Affected and Cleanup Action Taken.* Will begin investigation into cause of the elevated levels and remediate to approved standard. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Signature: Approved by District Supervisor NMENTAL ENGINEER Printed Name: Andrew Cobb Expiration Date: 5.19.10 Title:Sr. Safety & Environmental Specialist Approval Date: 3.19.10 E-mail Address:andy.cobb@energen.com Conditions of Approval: Attached

Attach Additional Sheets If Necessary

10-26-09

Phone: 432-686-3599

Date: Jan 29, 2021

Ramona Marquez New Mexico Oil Conservation Division

RE: Energen Resources Corporation West Lovington Strawn Unit No. 8
UL "L" Section 34-Township 15 South, Range 35 East, Lea County New Mexico
OCD No. 1RP-2457
Delineation of Ground Water

Dear Ms. Marquez:

I write this letter at the request of Brad Billings of the New Mexico Oil Conservation Division to provide evidence of authorization of Wayne Price of Price, LLC to, consistent with the understanding set forth in this letter, represent and submit documents on behalf of Energen Resources Corporation ("Energen"). Energen is a wholly owned subsidiary of Diamondback Energy, Inc.

Mr. Price has been retained by Energen to consult and advise concerning claims of groundwater contamination associated with the West Lovington Strawn Unit No. 8. In that regard he has been authorized to submit documents on behalf of Energen to the New Mexico Oil Conservation Division, and in particular to submit those documents necessary to obtain approval for the installation of four additional ground water monitoring wells, as set forth in his letter of January 4, 2021 to Mr. Brad Billings and subsequent communication between he and Mr. Billings.

I trust that this gives you the information necessary to properly document the authorization of Mr. Price to act on behalf of Energen.

Very truly yours,

Andy Cobb

From: Wayne Price wayneprice@q.com

Subject: 1RP-2457 Amended

Date: January 19, 2021 at 8:25 AM

To: EMNRD Billings Bradford Bradford Billings@state.nm.us

Cc: Wayne Price wayneprice@q.com, Richard Olson rolson@hinklelawfirm.com, Clayton Barnhill cmbenviro@gmail.com

Dear Brad,

Please find attached the amended plan pursuit to our recent telephone conference call. I will also insert this E-mail and aerial view showing the additional MW-10 down-gradient well and the moved location of the up-gradient MW-9 well in your new electronic submittal system. Per your phone instructions we may begin the project.

Thank you for your assistance.

Wayne Price-Price LLC 7 SYCAMORE LANE GLENWOOD NM 88039 wayneprice@q.com 505-715-2809



January 05, 2021

Mr. Brad Billings-NMOCD-Albuquerque Office, 5200 Oakland Avenue, N.E. Suite 100, 87113

Via E-mail: EMNRD Billings Bradford <Bradford.Billings@state.nm.us

Reference:

Energen Resources Corporation West Lovington Strawn Unit#8 UL "L" Sec 34-TS15S Rg 35E

Lea County, NM OCD Case # 1RP-2457

Subject: Delineation of Groundwater

Dear Brad,

On behalf of the Energen Resources Corporation Project, Price LLC (Wayne Price) request OCD approval to install three (3) additional groundwater monitoring wells at the above reference location. The objective is to further define the vertical and horizontal extent of contamination at the site.

Our plan is to install an up-gradient well and two additional down-gradient wells. Please refer to the attached aerial plat for approximate locations. The attachment includes a simple dilution box model that assisted in determining the down-gradient distance for these wells. The estimated depth was taken from area wells logs and "Triassic" Red Bed maps for the area. (REF: USGS Hydrologic Investigation Atlas HA-62) complete report enclosed for reference.

The down-gradient well locations were place in order to assure future protection of known fresh water resources in the area.

Each well will be an EPA approved type nested well containing three isolated 2" well bores with isolation seals and proper sand/gravel pack, all completed in a 6" PVC casing. The top well will be equipped with 20 foot slotted screen, 5 feet above he current water level and 15 ft. below. The second well will be similar in construction and will have 15 feet of screen in the mid-range of the aquifer, and the third well will have 15 feet of screen for monitoring the bottom of the aquifer.

This will allow_samples to be collected at the top, middle and bottom of the aquifer to pick up floating hydrocarbons or density gradient constituents such as chlorides.

Before installation of additional monitor wells, we plan on collecting water samples from each existing monitor well for WQCC volatiles, semi -volatiles, metals, and

inorganic constituents to establish a new baseline and constituents of concern (COC's).

The first round of sampling of the three new wells will also include these COC's. Attached is the most recent water analysis that was collected in 2018 with up-dated site plat. The 2019 event is missing, and we will report the next results in the first quarter of 2021.

Once the new wells have been installed, levels measured, we will utilize EPA protocols, properly purge with Ph., Conductivity, and Temperature measurements to ensure we are obtaining a stabilized sample before collecting, preserve, and then analyzed at an approved Laboratory.

A report will be sent to you with findings, conclusions and recommendations.

If you have any questions, concerns or comments please contact me at wayneprice@q.com or 505-715-2809.

Sincerely,

2 Pro

Wayne Price-Price LLC 7 Sycamore Ln Glenwood, NM 88039

CC: Richard Olson-Hinkle Shanor LLP
Bill B. Caraway-Deputy General Counsel Diamondback Energy
Andy Cobb-Diamondback Energy Inc.
Clay Barnhill-CMB Environmental & Geological Services
Wayne Price-Jr BSME Environmental Engineer

Attachments:

- 1- Aerial view of proposed wells.
- 2-GW Model.
- 3- USGS- Geography, Geology and Groundwater and Histoy.
- 4- Annotated Site Map with most recent Chlorides.
- 5- Nov 2018 analytical result report



Dilution Box Model Energen Resources-W. Lov. Strawn Unit #8 UL I-Sec 34-Ts15S-R34E OCD 1RP-2457

Model Objective:

To determine a reasonable distance for installing down-gradient monitor wells to define the outer limit of the contamination

Model Description:

A simple volumetric dilution model that compares the estimated source volume at certain worst case concentration of Chlorides, to an estimated volume of down-gradient fresh water, and calculates the DAF (Diluton Attenuation Factor) for the site. By varing the down-gradient length (a manuel reiterative process), then the assumptions provides a calculated distance for the installation of down-gradient wells. Model assumtions for the initial source area was taken from the site diagram and initial depth estimated. The mixing zone lateral width of 100 feet was used as several EPA DAF models use this default dimension. The depth was determine from the estimated depth of the first confinin layer in the Ogalla aquifer in this area.

Model Limitations:

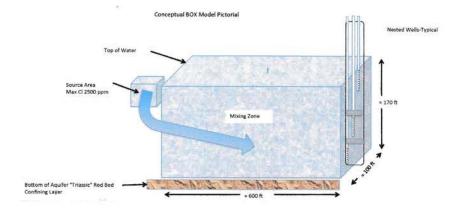
This model is for estimation of MW placement, and only provides an Initial starting point. Depending upon future sampling results

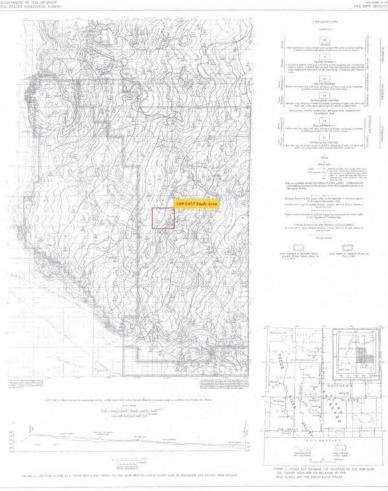
will actul determine future delineation work.

Model Results:

The model results indicate that the wells can be approximately 600 ft down-gradient and still maintain a Chloride level of the natural

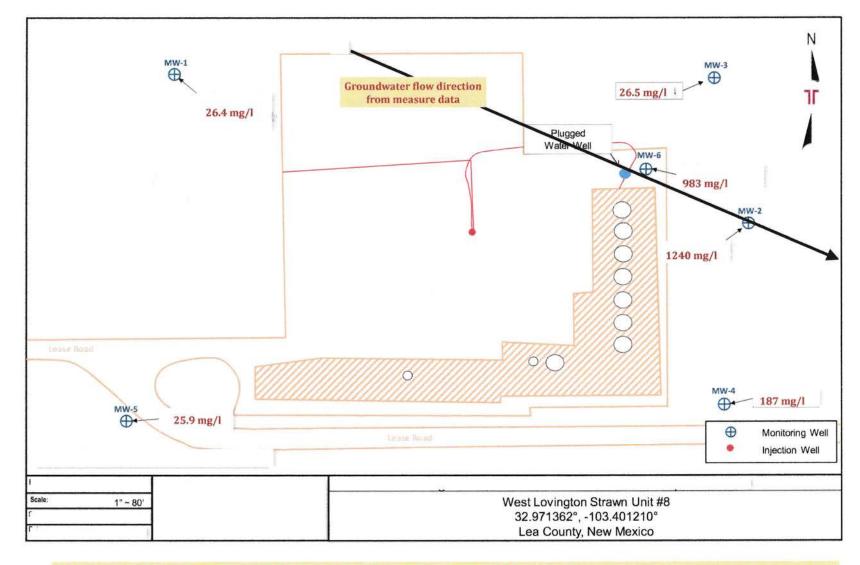
VOL Ft3 125000 Depth ft 50 Gal/ft3 932,500 Diluted Volume Down-Gradient 100 170 10200000 76,092,000 81.6 DAF Source Diluted down Gradient 2500 PPM 31 PPM 2,500 ppm 2500/Daf= Estimated Chlorides within statistical range for background





GROUND-WATER CONDITIONS IN NORTHERN LEA COUNTY, NEW MEXICO

Released to Imaging: 2/21/2025 11:17:21 AM



Plat copied from OCD Well File Annotated by Price LLC to show the Nov 2018 chloride sample results: Analysis attached herein. Jan 05, 2021



Certificate of Analysis Summary 606107

Terracon Lubbock, Lubbock, TX

Project Id:

AR157026

Contact:

Brett Dennis

Project Location:

Project Name: West Lovington Strawn Unit #8

Date Received in Lab: Tue Nov-20-18 08:45 am

Report Date: 29-NOV-18

Project Manager: Kelsey Brooks

hloride	Ciminital	26.4	12.5	1240	250	26.5	12.5	187	25.0	25.9	12.5	983	250
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
	Analyzed:	Nov-28-18	16:21	Nov-28-18 1	6:59	Nov-28-18 1	7:11	Nov-28-18 1	7:23	Nov-28-18	17:36	Nov-28-18 1	7:48
Chloride by EPA 300	Extracted:	Nov-28-18	15:00	Nov-28-18 1	5:00	Nov-28-18 1	5:00	Nov-28-18 1	5:00	Nov-28-18	15:00	Nov-28-18 1	5:00
	Sampled:	Nov-19-18	13:25	Nov-19-18	14:45	Nov-19-18	14:15	Nov-19-18	13:50	Nov-19-18	12:55	Nov-19-18 l	15:20
	Depth: Matrix:	WATE	R	WATE	2	WATER	2	WATER	2	WATE	R	WATER	2
Analysis Requested	Field Id:	MW-1		MW-2		MW-3		MW-4		MW-5		MW-6	
	Lab Id:	606107-0	001	606107-0	02	606107-0	03	606107-0	04	606107-0	05	606107-0	06

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks

P
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of
5

Received by OCD: 10/15/2024 2:45:57 PM

					ocon	Laboratory: Address:		Aber	deen exas 79	124			LYSIS JESTED	<u> </u>	_	TT	RECORD LOG LAB USE ONLY DUE DATE:
Off	ce Location	Lui	bbock			Phone:								1			WHEN RECEIVED (°C)
Pro	ject Manager	Bro	ett De	nnis		Contact:					_						Page _ 1 _ of _ 1
	pler's Name		ett De		1:	SRS #: Sampler's Sig	natup	1	7			000 po					
ro	ect Number A	R157026			Project Name West Lovington	Strawn Unit #8		1//	No. Typ	e of Conta	ainers	PA Meth					
Matrix	Date	Time	Comp	Grab	Identifying Marks of S		Start Depth	End Depth	250 ml Poly			Chloride (EPA Method 300)					
W	11/19/2018	13:25		Х	MW-1		O)	w	1	+	+	X	-	-	+	+	Lab Sample ID
W	11/19/2018	14:45		X	MW-2				1		+	r x	-		+-	+-+	+
w	11/19/2018	14:15		х	MW-3				1	-	-	x	\rightarrow	_	+	+	3
W	11/19/2018	13:50		X	MW-4				1	_	+	x	\neg	+	+-	+	- 3
W	11/19/2018	12:55		Х	MW-5				1		1	×	\rightarrow	_	+	++	+ 2-
w	11/19/2018	15:20		Х	MW-6				1	\top	1	x	_	+	+	-	+ >
4												T T	1		+		9
-			\perp														
+			\perp														
+			+	-													
JRN	AROUND TIME			DAN	Normal 48-Hour Rush												
lingue	Shed by (Signature)	2			Date: 11-20-18 6:45 Date: Time:	Received by (Signature) Received by (Signature)	2	TRRP	Laborato	Date:	W Chec	Vine:	15 N	☐ Yes OTES: mail res	sults to:		
	hed by (Signature)				Date: Time:	Received by (Signature)				Date:		Time			kçwil	iams@te	terracon.com erracon.com
inqui	hed by (Signature)				Date: Time:	Received by (Signature)				Date		Time;			MIDI	io.kom(d)	terracon.com
tris tamer		Vastewater 40 ml vial		W - Water N/G - Ambe	5 - Solf L - Silver Glass 11. 250 ml - Glass wide mouth	und A - Air Bag P/O - Plastic or other	E - Chancoal	tube	8 - 5	udge			-				

Appendix B Monitor Well Logs



mines / Client west Lovington Strawn Unit # 8

Energy Resources Corp OCD case #IRP -2457 WELL COMPLETION MW-9 SCHEMATIC OF TRIPLE NESTED MW-9: mw-9 (Deep) + mrs-9 (middle) + mw-9 (Shallow) 8-in borchole white walker 11-40'= bentonite cement great to 73 695 40'-45'=3/8" bentonite chips soal 45- 40: 10/20 sand pieter pack 0,020 BEHORVE LR9/14/21 -50'-70' = 2' SCH 40 PVC 0.020" slotted screen 60 73-123'=3/8" bentonitechips seal 96 100 110 123-147'= 10/20 sand pilkspack (PE -128'-143' = 2"SCH 40 PVC 0.020" sea Head screen 130 143-145' = 2'sump + endcap 140 147'-170'=3/8" bentonite chips soul 160 170'-194'=10/20 sand filter pack 170 175'- 190'=2"SCH 40 PVC 0,020" scottad screan 180 : tigo - 192'= sumpt endcap 190 :: 10:10:2: A. A. a. P. 194'- 197.5' = seough 111.5 bas NOT TO SCALE -

-				Energen	Rasources OCD	0
	oject				1 1 RP - 2457 Sheet	t: 100 4
	catio	n:		west	Lovington Strawn Unit #8	12-1-
Cli	ent:			Dia		number:
Dri	ller:			Trey	Cain Total	depth: 197.5' bas
Dri	Ilina	meth	nod:			g diameter: 10-in to 73 ft los 8-in to 10
		date:				ed by: 2. Brdeson
		evel:		111712		
***	icoi i	CVCI.			Date	measured:
	T	SAMPI	F		SOIL DESCRIPTION	COMMENTS
depth (ft)	-			standard penetration		COMMENTS
epth	interval	number	(inches)	test results	Color, soil type, relative density or consistency,	Monitoring well installation, geotechnical
Ü	Ē	Di	(inc		mineralogy, USGS classification moisture content	properties, analytical tests, instrumentation
	top	Sole		0-0.71	Topsoil: Pine sand/sill) clay torganie to	rates (7.54R5/4) and white
-	1				caliche at 0.5 bes: dry	
	1		55	+++	0-7.5; caliche sandstone; very	0-7.5': PD = 5,4ppm
				++	pule brown (104R 8/2); feinto	1-2-31
1				++	medium sand; well inclurated, dry, 7.5'-12.5': sandstone / caliche	7.5'-12.5' PID=5.18pm
-	1		55	+++	- same as above -	
	-	_	_	++	- SWAL 43 A 800E	
			55	+ +		
				+	1- cl 13 cl	12 cl. DIX 202
-	1			+ + +	12.5'-17.5': sandstone / calide	12.5'-17.5': PID=0.3ppm
-	-			+,		
1			55	++ 7	in al and defendance in	7.5'-20.0'-PID=3.0ppm
				+++	17.5 - 20.0 sandstone / caliche	
				+		20.0 -25.0'. PID=2.2 ppm
-	1		55	+ +	-same as above -	20.0 -25.0 11 12 212 ppm
-				++		
				+ ++	25.0'-30.0', 55/caliche 2	5.0-30.0': PID=2.8pgm
				++		
-			55	++++	- same as above -	-
		-		+ +	2001 22 010 0 011	
-			SP		30.0 - 32.0 = sugarlike sand; eight	30.0'-37.5; PID = 3.6 ppm
	1			17.5	brown (7.54 R 6/4); flingrained, well sorted; moist.	7
-	1		55/	. ,	32.0 - 37.5 ; sand with thim 55-layers;	
-	100		SP	4	pink (7,542 813); very Rue to fine sand;	
				الدات	ss slightly culcareous, damp.	
	1				32.0 -37.51 Same as above (7.54R7/Wpink	2:
				: ', '	subungulas to subrounded	
-			155/	5	37.5-45,0=5ame as above	-
	-	1	150		(44'-45' colcaveous sandstone layer.	340
			-	- · - ·	451-481 same as above	
-	1			1	48'- 55:51 sugareillo sand, eight	
_		-	(0		reddish brown (53R6/4); well sorted;	16.
			SP		finegramed sand; subrounded; mois	49'-51'= capillary fingle (=very moist
1					A+ 49'-51 = 004 mo(s+	
1	-				ATSI STORY (mother) (ngodor	detected), wet. 52,5-53,5: PID- 14,6 pg
	-		SP		55,0 -60,0 1 Sugare: Un De a sound	
			71		reddish yellow (54 R 6/6); well sorted, subrounded irregulas thin 55 layers which are slightly	
					their SC Drounded irregulas	
	1		1		33 raues which are sughty	

	_	ect:			Case 7	RESOURCES UCD 4 1RP2457	Shee	t:	2014	
(Loc Clie Drill		n:		Djam.	ovene ton Stewn Unit # 5 on deck Energy Cain	Job i	number: I depth:	197.5' bes	-
1	Bor	ing o	met date evel	:	Sonic C	- 9/23/21	Borir Logg	ng diameter: ned by: measured:	10-m to 73 ft bgs	8-in ho1
Γ	2		SAMP	PLE	standard	SOIL DESCRIPTION		COM	MENTS	
	depth (ft)	interval	number	recovery (inches)	penetration test results	Color, soil type, relative density or consistent mineralogy, USGS classification moisture conte			stallation, geotechnical al tests, instrumentation	
	1 1 1 1			SP		reddish yellow C54R6/6); sub rounded; well sorted; irregular thin layers of slightly calcarous sand saturated				
	1 1 1 1			sp		70'-80': sugarlike same.	d;			
	-			50 50 50 50 50		80'-85': Sugarille sand - Same as above (83'-84'= cal carous Sano 85.0-87.5': sugarlile samo - Same as above - At 86,5-87.5': calcarous	(stone)			
				SP.	37.77	87.5-97.5' supartike send reddish yellowo 59 R 6/6); su well sorted; the , satura CSS very rare to non-exist 47.5-107.5' = suparcike san — same as above —	brounded hed.	;		
	1 1 1 1			sp	さんだい	107.5'-117.5'. sugarlike son	d			
-	1 . 1			sp	- A	A+ 112.5'-114.0': greyund thing	moted	·		
1				SP	- 1	At 115,0 -115,5 = calcarous;	Sound ST8h	e		

.00	ject: ation	ո:	3	west L	245 Desouvees OCD Case # 1RP-	Shee	1.*	
	nt:			Diamo	mdbak Energy	Job	number:	
Pril	ler:			Trey		Tota	depth: 197,5 695	
ril	ling r	neth	od:	Somic C	ore CLS-600 Roto .	Borin	ng diameter: 104 to 73 bes and	8 1 197
Bor	ing c	late:			21 - 9/23/21	Logo	ged by: Likedoreon	2 101111
	ter le				. , , , , , , , , , , , , , , , , , , ,		e measured:	
						Duce	measured.	
	5	AMPL	E	standard	SOIL DESCRIPTION		COMMENTS	14.1
=				penetration	GOIL DEGAM TION	p pic	COMPLETES	
depth (ft)	interval	number	recovery (inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic	Monitoring well installation, geotechnical properties, analytical tests, instrumentation	
			SP					
							7	
7		0					-	
+					and is a sugartile and			
				, . !	127.5-137.5': sugartile sand reddish yellowcs & 6/6); fine			
			SP	2 ,.	sand; subrounded und conted			
				*	sahirated.			
-			SP	1.	NO 55 at all	/	4	
-			-	+ . 1				
								.,
					137,51 - 147,5 : sugarlike sound		1	
-			SP		same as above		+	
	_		-	- '-	Shower too began			
_			SP					
			SP	1 3	4+ 147.5-148.5 : 55 ; to very hard		Not: 147.5-1485 above -	
-					with grow staining above		the 55 gray sugar social	.4
-			35				the 55 gray sugarsand PID: 2.4 ppm "Vinyl-odor very had drilling of	
			100		148.5'-157.5': sugartike sand;		oed was areeing h	
			SP		fine sand subrounded, well sorted; well			
-					A+ 155' some ver his e sound wi	House	-	
-		1	2	,	At 155' some very fine sand wirdistinkt contact; looks more yellowish red than reddishyel		I +	
4			SP		yellowish red than reddish yell	you L	52K1619)->(52K2/6)	
-		6	-		157.5'-167.5'= sugarcille sand;			
					fine sand, subrounded, well			
			50	, ',	sorted, wet; has trace of verei for	-		
-			1	3.00	sand and sill day; getting of	queses	1	
-						1	1	
-		1		2. 1	167,5'-1775's sugarcike sand			
6		1	SP		more yellowish red looking the	11		
-	3		[1 , 1	reddish y ellow; some very fine so	14	1	
		-	1		siet/clery in mahix; wet to ve	ny me	(34)	
-			SP		ong wense.			
1		1	1		177.5-186.0: sugaseile sand	1		
+					- asabove -		1	
-	1		SP	1	A+ 183': drilles reports very deus	2	1 -	
-	1		1	. 1 .	Roumation; slightly more very fin	e	1	
	1	1		1	sound/ siet/ clay with increasing	1	The same of the sa	

Clie Drill Drill Bori	er: ing i	meth	nod:	Diam Trey Sonic	1RP-26 In Resources OCD casett Louington Strawn Unit the sondback Energy Cain Core CLS-600 Roto Service) [21 - 9/23 21	Shee Job Tota Bori Log	number: al depth: ng diameter: left 40 f 4 197.5 f 6 197.5 f 6 20 by: e measured:	95 and 8"
depth (ft)		AMPL B		standard penetration test results	SOIL DESCRIPTION	graphic	COMMENTS	7
deb	interval	number	(inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	8	Monitoring well installation, geotechnical properties, analytical tests, instrumentation	
-					see previous p. 3 , continued!			
-					occasional mm-size rounded rock fragment/ pelable voug moist]
-			60/		186.0'-188.0': very fine sand (trace	Pines		
-			SP/SM		madium sand; color more to substitute	44	Carous NOTE: 188'b	-
-	_		SME		subangular to subrounded : slight 5-7 % silt clay; was to maidy	Tense	"TRIMSSIC" RE	
-			01/		188.0 - 195.0 = voy fine sand with sich	1 - de	be Hom some	1-219
-			150		matrix; color more to reddish hus; slightly calcalous with mothed an	1000		188.5
-				tstone	slightly calcaeous with motted app very dense moist (lacking tal pebbles from previous wells).	rock	fragments)	+
-			ML					+
	7				sand/sill clay; eight greenish a (GLEY 1 / 7.1); moist to dam	mu		=
1					(GLEY 1/7.1); moist to dam	p		1
			1		196.0'-197.5' \ siet; siehy-clay	Sall .	ery	7
					fine (subangular) sand; rared rounded per pebbles; red (2.	Tam	7/1	7
					dettil 1 1 06 · · · · · ·			7
					with bedding planes (2) sim previous wells withhorizon to along irregulat this class to	ieas	to	
1			. 1		along irregular thin clay la	eser	churing]
-	٠,				7	0		
4					**			1
\vdash						- 2		
-								4
1								+
-			-					+
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								1
								1
. 7	100							-

					Resources OCD	Sandan California		mw-8
rc	ject:				1 RP - 2457	She	et:	1014
00	catio	n:		west	Lovington Strough Unit:	48		-+-(-
lie	ent:			Diamo	mdback Energy		number:	
ri	ler:			Tinder	, Meples	Tot	al depth:	
	ling i			Sonica	ore CLS-600 Roto Sonic) Bori	ng diameter:	
	ing o		:	9/15/21	-9/17/21	Log	ged by:	L. Anderson
/a	ter le	evel:				Dat	e measured:	
-		SAMP	1 F		SOIL DESCRIPTION		COM	MENTE
		-	T.	penetration	SOIL DESCRIPTION	- Phic	СОМ	MENTS
neban	interval	number	(inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic		italiation, geotechnical it tests, instrumentation
_			1 5 0	cole				
-				+++	0-40,91: Top soil; brown 755R	/2	0-5.2,1	
-			45	++ ++ ++	fine sound with silt flougt organ matter ; dry; white caliche from	nants	2.5-7.5 : F	, D =
			177	+++	0- tis caliche w	rhider		3
-		l	-	10 1 1	dry, very hard			1
200			SP	SPI	019 - 7.3' sandsford calide	3.0.	17.5'-15.1	o': PD =
				9.2	medium gangrained; well inde	my hol		
-			SP	- >.1.	7.3 - 12.5 1 suparlille 50. N	141		-
-	70			50/-	(54 R 7/4): very line to line 5	and "	15.0-17.5	5': PID= -
-			55/00	55/sp	subrounded to subamqueer, solo caliche no dules, well sort	dry		-
-			WW	···	3 % caliche nodules, well sort			_
_		-	-		12,5 - Soundstone; pinked	while		
-			4	-1-	C7.54 R 8/2); layers of 55 w very fine to fine sand layers caliche cemented (calcar ou	1+1		
_			75/	35/5P	caliche cemented (calcare ou	5).		
					very hard, dry, (17'-27'ssle	ss freq	ners).	
		-	-	1:00	At 17.5 sand timinos ss			
			SP	4	27:0 - <49:0) = Sound (pink			7
				1	+ signile sand	(most	4	
-					very fine to fine, subangu	act		-
			SP		to subrounded grains, well			1
***	**		-		calcaeous ss-layers, day) Huin		4
-				' '	The francition to sugarsand is			+
-			-		gradual			
-					47.5 - 50 ft damp			4
-			SP		reddish yellow (546/4)			
-							475-50.0	= dams
,					491_ = sugarsundipiu	K	1-62 6	= Nerca maich
_					(5 JR + (4) ("ine orained, sub.		57.0.52.0	Leapillary &
					roundle of the 10 sourced.	1	52,0-55,0	capillary f
			100	'SP .	50-525 very moist = capillary & 52'-55' - wet	reinge.	Sout	urated 55!
			SP		At 55'= saturated			2.5) oppm
-					A+51-52: moderate/ eight g	ay de		-
						1 -		-
-					57.5-67.5 6 ugarsand.	comm	wear on pil	

								vices, Inc	2457				
F	roj	ect:			Enerce	n Resou	was oct	CaseX		Shee	t:	2 of L	1
1	OC	ation	1:					Unites	-			7	1
(Clier	nt:			Diame	mdhad	Energy			Job	number:		
[Drille	er:			Tuch	Manke	1 Too				depth:		-
			neth	od:	Sauce	Coxe (1	5-600	y Cain Roto Son	10)		ng diameter:		-
		ng d			9/15/	21-9/	12/2/	KDT6300			ged by:	L. Hud	
		er le			111310	- 11	11121				measured:	Linno	450
										Date	measureu.		
Г	T	S	AMPL	E			SOIL DESC	RIPTION	1		CON	MENTS	
1	Septh (ft)	- T	er	5.3	standard penetration				_	graphic		11-12-11-0	
1	dept	interval	number	(inches)	test results	Color, s mineralo	oii type, relative o gy, USGS classific	lensity or consisten ation moisture cont	icy,	de la	Monitoring well in properties, analytic		
-	1	-=		5 =									
1		1		In			red from		1	1			
1		1		SP	· · ·	subrou	noted pi	ne sand	1	1			
	7					saturo	hed, der	uses than a yers of sau and inte	rbou	2/			
1	-				1, 1, 1, 1	some +	him lag	yers of san	dsh	me			
1	4	1		-		of sam	e fine s	and inte	sper	sed			
L	_				۲, ۰	67.5-5	17.513	igarouna	1				
					-, ^	gum	easab	ove					
	7	1		SP	5	some	regul	ar layer	rs !				
1	-			6.5		withc	al careo	us com or	nah	100			
1	4				1 0								
ı	4					776	8201:	Sugarson	1	- 1			
_					4 . 4	-							
1	1				,			abou				22/	~
	7				. , .	et to	-80' : W	redium e	may		78'-80' =	= P ID=6;	TPP
	+)		SP		disco	eoration		7				
	-			-	1. ;								
	4				11	875-	9250	wosand	1				
					···								
		1			. ' ' -		me as a						2011-0-2
1	7	1				A+ 93	nome	mess in	dus	ions			
1	-			SP	. ,								
1	+			12	٠,٠							*	
1	-					97 5	107 m.		1				
								sugarsan	aL				
				1	:	San	re as al	٥٥٠					
1	1												
1	7			SP	1 1								
1	-			1	:								
1	-							_/				,	
-	_					-	-117.5	The state of the s	no		X		
						50	me as	above					
1						min	conds fon	a longer	500				
-	7			SP	1. 1.	-> ad 11	0 0 - 11	-	-				
1	-				11 11	١١٨ الموك	6-112	3 695					
	-			1	-	- 100	10 115	1 Mgs					
1					4	117.5'	-127.5	Suparson	al				
						Sci	me as						

	CIVI	RF	nvii	ronn	nental &	Reological Services, Inc.	Во	ring ID:	m0-8
	Pro	ject:			case A	lesources OCD x 1RP-2457	She	et;	3 of 4
	Clie		n:			and back Every		number:	0÷
	Drill Drill		meth	nod:	Jones C	Core CLS-600 Robo Sonic		al depth: ng diamete	:
		ing c ter le	late: evel:			21 - 4/18/2/ 9/17/21	_	ged by: e measured:	L. Andoso
-	2	S	SAMPL	_E	standard	SOIL DESCRIPTION	T	CO	MMENTS
	depth (ft)	interval	number	recovery (inches)	penetration test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic		installation, geotechnical ical tests, instrumentation
	-	. Historica i Maria		SP		117.5 - 127.5 m previous page			
-	-					127.5- 137.5' = sugarsand			
	1			SP	,	127.5-137.5' = sugarsand reddish yellow (54 R 6/6); fine sand subrounded, well sorted; wet			
	-			SP	2, 3	sorna, wa			
5	-			SP		137.5'-145.0': sugarsand, same as above A+138'-140' medium gray			
) [55		At 138'-140' medium oray	-	NOTE : 1	38'-140'=gray
	-			SP	.,	overall hand dilling 48	13		
	-			Sp	AAA:	145'-155'= sugassand			
>	-			SP	-	VI			
	-					155'-157.5' = sugarsand			
0	=			SP		157.5-167.5: sugarsand			
				sþ		yellowish read probably due trace of clay (1%), but shell			
	-					fine sand, subrounded, have dilling; wet ; well sorted.	1		
0				SP	, ,	167,5-177.5 1 sugarsand			
	-	2*		SP	,	with 1% clay, reddish yellow (548 616); well sorted, wet, getting denser still			
	-			Sp	- ; ; ;	177.5-187.5 on page 4 of 4 (see below!)			
-									

	3000000000	ject:				Resources OCD Case#199- Sheet: 4094
	Clie		1:		Diamo	Lovington Shawn Unit #8 molback Enorgy Job number:
	Drill				Trey C	Total depth: 197.5 bas
		100	neth	od:		ore (LS-600 Roto Sovic) Boring diameter: 10" to 73" bas and 8" to 197 21 - 9/17/21 Logged by: L, Anderson
		ing d ter le			9115	
	Trai	ici ic	VCI.			Date measured:
	_	S	AMPLI	:	standard	SOIL DESCRIPTION COMMENTS
	depth (ft)	20	ber	es)	penetration test results	Color, soil type, relative density or consistency,
	deb	interval	number	(inches)	test results	mineralogy, USGS classification moisture content
180					:	177.5' -187.8'; sugareik fine said;
	-		1	SP	·.': ,': .'	reddish yellow (54R 6/6); densa; wet
	-		1	rn		A+181 = 1% mm-size rounded rock/fragments
37.	-			SP		Tome very Pine sand ; 2% si et/clay = slowey increase with depth.
				sp/sn	7	187.0'-191.0'= very fine sand (trace matium sound),
90				sp/sn		5-7% silt/clay; slightly calcareous; 10/0 capiche nodules; danse Charden Bling;
96	-			-	1	web to moist. 191.0'-194.5'; very fine sand with sie y/ "TRIRSSIC" Red Bed
		- 1	f	SC		cayey manx; color changes to more
45'-			F	_		reddish hues j small voids filled with
- 1				ML		with a mother texture 11-2% rounded
97.5				ML		nodules; most; very haddrilling.
1						194.5-197,51, silt; stely-clayer
	-					angular very fine sand; red (2,54 R 5/6),
	-		1			10/0 small peobles and largequartegrains,
	-		1			dry; very hard drilling; separates
	-					hori & on hally along irregular thin layers of clay (irregular bedding planes?)
				-		
	-					-
	-				- 1 1 -	
	-					
	-					
1				2		
		1				
	0.7					
	-					
	-			4		
-		1	1		1	

						1 RP - 2457
Pro	ojec	:t:			Energe	n Resources OCD case & Sheet: 1 of 4
Lo	cat	ion	:		west	ovington Strang Unit #8
Cli	ent	:			Dian	rondidack Energy Job number:
	iller					em maples Total depth: 197,5 695
Dr	illin	g m	neth	od:	Sonic	Core (Ls-600 Rotosonic) Boring diameter: 10-in to 70' and 8
	0.00		ate:		9/9/2	21 - 9/13/21 Logged by: 2. Andoson
Wa	ater	le	vel:			Date measured:
	_					
(3)	-	T	AMPL		standard penetration	SOIL DESCRIPTION COMMENTS
depth	Interni	2	number	(inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content Monitoring well installation, geotechnical properties, analytical tests, instrumentation
1.	+	1			caliche -	it inposore; orack prount (+.53/28/3)
	7		•		1+1 + 1+	madium/fine sand siet day, roots, danse, moist. A+0,5 start min-sièc 2.5'-10.0': PID=2.1ppm
4	7	1		55	+ + + + ,	caliche nodules (white)
6	1				+++	0.7'-2.51; caliche, while, dry
8	F				LIL	2.5'-7.5': calcascous SS; piukishahil white
-	+	-			+ - +	0 6-in diam; pea-size sounded rounded a ravel [trace)
2	4	1			+ +	7.5'-2315; calcareous 5.5;
4	1	.			, t . 1	10'-20: PLD=0.4ppm_
6				55	1 + +	- same as above -
					7 ` `	* calcium carbonate cemented
8	1				+ +	5andstone 19.5-52,51:
	1			-		sands fore SS; pink (54R7/3)
22	-			55/		with imagular
24	-	1		SP	- in	sorted
26	-					the se visible in the SS are
28	-				_, _	trace of mm - size subrounded
	_	_			· -: -: '	rock fragments, caco, comented.
32				1	',	cali che fragments less than
34	1			55/ 15P	:-	10 %; Dry
36	1					
38					-,-	A+39-50 pinkisharay (54R7/2)
_	+	-		54	1, 1	dry.
42	-			/sp	- F	0
41	4	1			=	
46	-					
48	2				1:	
49				1SP	:	1449 moist formation: well sorted
-				ISP		lenser of ss; fine subrounded & 52.5'-55.0: PID = 99.9 ppm
52 51	+					Sand : reddition 1 145.8 pom
3	7			_	1	52.5'-57.0'= very moist = capillary Pringe . (pik 54R 744)
56	1	-		SP		At 57 saturated
58	2-					54.5-60.0') gray discoloration 60.0-61.0' Sand "vinyl"-like ador 60.0'-61.0=PID= 17.0ppm
100		1		1		-and Ving - wile pator 60,0-61.0=110=11.0 ppm

				_		1RP24	57		2 04	
	ject: atio			energen	Resources Corp C		hee	et:	2014	
	nt:	1.		West	Lovington Stra	won Unil #8	oh i	number:		
	ler:			Deam	molbacic their	7			107 5	
		+	n el	Sus	ten mapas	/ · · \ P	Ota	l depth:	197.5	ے : م
					me (LS-600 R	oto sonic)	Oni	ig diameter.	10 in to 70' and o	3 -m 10
		late:		719121	-9/13/21			measured:	C. Maceson	
Ya	tel le	ever.					ale	measureu.	0.000	
_	5	SAMPL	E	standard	SOIL DESCR	RIPTION		COM	MENTS	9
depth (ft)	interval	number	(inches)	penetration test results	Color, soil type, relative di mineralogy, USGS classifica	lensity or consistency, ation moisture content	60		stallation, geotechnical al tests, instrumentation	
	_			-1 1.	59'- 67'= sugars	sand				
-				1	Jaco vistando	1266)				
-			4	Sp	(reddish gallo	no (5 4 2 6/6)				
_		Ross	0000		67.0-77.5: Lo	st 0.5 ftsample			1	
					A+67.5 Pl; sugars	sand, fine well.	امرا	11 chandlan		
-				· · ·	soft so heraled	· less than 1%	7.00	asngusta		
-				210 1	of mm-tocm-		1		-	
-				6	gravel /salcare	ous sandstone	`		-	
-				71 .	concretions.				-	
				- Maria	At 72,5'-73,01 ap	oproximately	لمم	<u>.</u> -		
				====	6" layer of call	reous finesand				
				CA	(Nodules).					
-				,31	77.5-87.51: 3	ame as above				
-				3P-	reddigh y ellow	578 6/6)			7	
-				1 ;	A+ 78.5 -79.0'2	calcareous sundstone noduce in fine sand mate				
-				SP'	cas above).	- fine sand mat	nt		-	
_			-		37,5'-97.5'= sa	me asabove				
-				, , 2 b.	reddish yellow	(532 6/6).			-	
		-	100	100					-	
		-		2	94,3-94.7 appre	se masely				
	(10	della	MADOS	5" of calcareous	matrixces abou	9			
_				SP		me as above			127 1	
	12	1		- ,	- CS	42 5/6)				
-				- ! re	daish yellow (5.	alconodules so				
5			-	37.	مي مدون	2000 Car 65			7	
_			1		4+ 105.5-1062=	calcing apabove)			7	
-		1			107.5-117.5 ES	ane as above			-	
			-	SP.	reddish yellow	59K (6)				
_				<u>`````</u>	A+1/2.1-112.7'= co	alcinodules 55				
					in non-calc. fines					
		-		SP	A+ 115,2'-115,5'= C					
-	1			sp	in non-calc Pr	ne sand				
8			1	75-175	1471 150	was some of				
					Tolland for	# 616) sumo	U.S.			
					endos Como					

			8		Resources Corp.	-	~ * ^
Proje					Case# 1R10-2457	She	et; 34 of
Loca		1:		west a	Lovington Strawn Unit *8		
Clier					ndback Energy		number:
Drille				Jus	ten maples		al depth: 197.5
Drilli				Soni	c Core (15-600 Roto Sonic)		
Borin				9/9/2	1 - 9/13/21		ged by: L. Au
Wate	er le	vel:				Date	e measured:
LT	S	AMPL	E		SOIL DESCRIPTION		COMMENTS
depth (ft)				standard penetration		graphic	
dept	nterval	number	recovery (inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	gra o	Monitoring well installation, geof properties, analytical tests, instru
-	-		50	0			
-	1			4c '.	117.5-127.5' sugars and reddish		
	1			· cn	yellow (54R 6/6); mostly fine sand, subrounded, well sorted,		
1	1			.26	sahurated (No more calcareous	1	
7	1				nodulas present.)	1	
4	,			,	127.5-137.5 : same as above	1	
					same as above		
٦	1			. , 1-			
+				٠.			
4				Sp'	- 1 1		
					137.5'-147.5', same asaba	*	
				- ' ' ' .			
		25-1-1-1	T	. 4 .		1	
1	1						
4	1			,		1	
				Sp	,		
					147.5- 157.5' same as above		
7					From approximately 152,5'		
-			+	-	still sugar and but slight	min	lund
1				. , , ,	color chance from reddish	1,00	The state of the s
				2 `	gellow to yellowish red CSYR	5/6));
1				SP	also trace amount of silt day in matrix and subrounded to	1	1
-					in matrix and subrounded to	1,	
				`	sub angulas grains; saturate	d.	
-					157,5'-167,5' = asabove		
				- ' '			
					(A) 4.	1	
				1			
-				1 70			
-				SP	167,5'-177,5: sugarsand		
				SP	1.0000 vial red (5425/6):		-
1 1 1				SP	yellowish red (5925/6):		
				SP	yellowish red (5425/6): as above; but a lot denser,	ay-	
			•	SP.	yellowish red (5425/6): as above; but a lot denser,	9	
				SP	yellowish red (5925/6):	3	

-	-					& Geological Services, Inc.	CTUBE TO FRANCE	ing ID:	mw-
	Pro	ject:			EMOSER	1 Resources Corp OCD Case*			4 of
		atio				unglon Strawn Unit #8			- 1
	Clie				Diama	ndback Energy	- Job	number:	
	Drill				Tuelo	n Maples	-		107 0
			meth	od.	Sauce	Core CLS-600 Roto Sonic)	Rori	ıl depth: ng diamete	177.3
		10.00	date:		9/0/2	11-9/13/21	Logi	ig diamete	1.10-unto
			evel:		7/9/2	1 - 1113/21		ged by: measured	L And
							-		
	3	-	SAMPL	T.	standard	SOIL DESCRIPTION	ic	CC	OMMENTS
	depth (ft)	interval	number	recovery (inches)	penetration test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic		l installation, geot tical tests, instru
80					4.4.				
				SP		1025 1010 11:00 11:00	4.		
	-			CD	1.4	182.5 - 186.0 i fine sugarlike sar yellowish red to reddish yellow, u sorted, subrounded but siet/cla about 2% and in creasing with de	000		
86	-			SP		sorted subrounded but siet/clo	44		
				SP/		about 2% and in creasing with de	Ah.		
90				/sm		1% mm-site rounded rockfragment	and		
90				Sm/		lace quategrains; saturated.		A+191	off bas:
0.3	-			SC		186.0'-190.0'1 very fine to Pine 501 - 501 Subangular, clay silt 5-7%; 56	dis		sic Red
93	=					calcareous , wet	800		scroun at 1
				ML		190.0' -193.0' mostey very fine san	d:	C-011 oran 3	Stown act.
						subangidas; yellowishred (54R 5	163;		
1	1			ML		subangular; yellowishred C54R 5, 5-7% silt clay; calcaeous wi	tha		
17.51	235			175		mottled appearance; moist f	dany	, veryhand	
						193.0'-197.5' = silt / silky - claye	4		
						angular fine sand; red (2.54R 5%	D: 1		
	-					trace rounded pebbees and graves	2		
	-					to 35 mm diameter; matrix sli	ghtle	1	
	_				100	calcaveous; very small crustal	5	-	
					100	comagnetite?); very hard, dry,			
						Separates horizon ally alon irregul	45		
	-				100	" wavy" clay layers (bedding	().		
	-			1					
					20 10				70
								The second secon	a successive to the successive to
									4
	-					61			
						720			
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					7.64				
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WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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1 2013 JAN 10 1A 10: 30

1. GENERAL AND WELL LOCATION	MW-1 WELL OWNI Energen WELL OWNI 904 MOOI WELL LOCATIO (FROM GP	Resources REMAILING A TE AVENUE N LATTI S) LONG RELATING WE	Corporation DDRESS DEGREES 32 DITUDE 103 LLLOCATION TO STREE	58' 24" T ADDRESS AND COMMC		W S (SECTION, T	• DATUM RE	ONAL) PREQUIRED: ONE TENTOUIRED: WGS 84	ΓΗ OF A SECOND	ZIP 1-1144	
	LICENSE NU WD1222		NAME OF LICENSED	DRILLER				NAME OF WELL DRILLING COMPANY Peterson Drilling & Testing Inc.			
:	DRILLING S	Į.		Dentu At Count 1999	muci i /em	DAPE US	LE DEPTH (FT)	Peterson Drilling & Testing, Inc. DEPTH WATER FIRST ENCOUNTERED (FT)			
	12/11/12		DRILLING ENDED 2/12/12	DEPTH OF COMPLETE 69.6	SU WELL (FI)	71	LE DEFIH (FI)	DEPTH WATER FIRS	ST ENCOUNTERED (FT)		
	COMPLETE	WELL IS: () artesian	O DRY HOLE	SHALLOW (UNCO	ONFINED)	STATIC WATER LEVEL IN COMPLE			PLETED WELL (FT)	
Tior	DRILLING FI	LUID: (∄ AIR	C MUD	ADDITIVES - SPE	CIFY:	 _	-	<u> </u>		
RMA	DRILLING M	DRILLING METHOD:									
DRILLING & CASING INFORMATION	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CONI	ASING NECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)	
2	0	49	6 1/2	PVC Casing F		FJ		2	Sch 40		
N.	49	69	6 1/2	PVC Screening		FJ		2	Sch 40	0.010	
2. DRILJ											
ĺ.	DEPTH FROM	(feet bgl)	BORE HOLE DIAM, (inches)		NULAR SEAL MA ACK SIZE-RANG			AMOUNT (cubic feet)	METHO PLACEN		
ERL	0	40	6 1/2	Grout				·	Tremie		
MAT	40	45	6 1/2	Bentonite Chir)S				Tremie		
ARI	45	69.6	6 1/2	8/16 Sand					Tremie		
3. ANNULAR MATERIAL											
FOR	OSE INTER	NAL USE					WR-2	0 WELL RECORD	& LOG (Version 06/0	8/2012)	
FILE	NUMBER				POD NUMBER		TRN	NUMBER 51	7451		
LOC	CATION								PAGE	1 OF 2	

	DEPTH (feet bgl)		COLOR AND TYPE OF MATERIAL ENCOUNTE	RED -	WATER	ESTIMATED YIELD FOR
	EDOM	70	THICKNESS (feet)	INCLUDE WATER-BEARING CAVITIES OR FRACTU	IRE ZONES	BEARING?	WATER-
	FROM	TO	(leet)	(attach supplemental sheets to fully describe all u	ınits}	(YES / NO)	BEARING ZONES (gpm)
	0	30	30	Tannish White Clayey Sand with Caliche		OY (9) N	
	30	35	5	Tannish Brown Hard Sandstone		CY ® N	
	35	71	36	Tannish Brown Medium to Fine Sugar Sand		CY ® N	
						ОУОМ	
						OYON	
_						OYON	
VEL						OYON	
OF V						OYON	
ÖÖ						OYON	
CL						OYON	
Ö						$O^{Y}O^{N}$	
E01	\					OY ON	
4. HYDROGEOLOGIC LOG OF WELL						CYON	
ΙΔ						CYON	
4	· · · · · ·					$C^{Y}C^{N}$	
						OY ON	
						$O^{Y}O^{N}$	
						$C^{Y} C^{N}$	
						$O^{Y}O^{N}$	
						$O^{Y}O^{N}$	
						C^{Y}	
	METHOD U	ISED TO ES	TIMATE YIELD	OF WATER-BEARING STRATA: CF PUMP	TOT	AL ESTIMATED	
·	C AIR LIF	т 📵	BAILER ()	OTHER - SPECIFY:	WEI	LL YIELD (gpm):	
	"						
z	WELL TES	T TEST	RESULTS - ATT T TIME, END TI	ACH A COPY OF DATA COLLECTED DURING WELL TES ME, AND A TABLE SHOWING DISCHARGE AND DRAWD	TING, INCLUDI OWN OVER TH	NG DISCHARGE ME E TESTING PERIC	METHOD, TO
NOISI	MISCELLA	'	ORMATION.				<u>,, </u>
SRV	MISCELLA	NEOUS IN	ORWATION.				
SUP							
SIG:						- 0	<u>2</u>
TEST; RIG SUPERV						company of the real of the	
5. TE	PRINT NA	ME(S) OF D	RILL RIG SUPER	RVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF W	ELL CONSTRU		ANALICENSEE:
w	ì					<u> </u>	
	THE UNDE	RSIGNED H	HEREBY CERTIF	FIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE A	AND BELIEF, TI	IE FORECOING IS	A TRUE AND
IRE	CORRECT-	RECORD O	F THE ABOVE D	DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS TO DAYS AFTER COMPLETION OF WELL DRILLING:	S WELL RECOR	D WITH THE STA	TE ENGINEER
SIGNATURE	[]					. 1	. ,
EN		- , \		- Lee Determi	i	117/12	
6.8		SIGNIATI	TIRE OF DRIFT	ER / PRINT SIGNEE NAME		1 U DATE	
	<u> </u>	JONAT	OVE OF DRIFFE	A TRINI SIGNED NAME		DATE	
FC	R OSE INTER	NAL USE				CORD & LOG (Ve	rsion 06/08/2012)
	LE NUMBER			POD NUMBER TI	RN NUMBER		
110	VC ATION						I PAGE 2 OF 2 I



WELL RECORD & LOG

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NO	OSE POD NL	IMBER ((WELL)	NUMBER)				OSE FILE NUM L-13218	PODO			<u>-</u>
ΣĀŢĪ	WELL OWN			Corporation				PHONE (OPTI	ONAL)			
100	WELLOWN			Corporation				CITY		STAT		ZIP
GENERAL AND WELL LOCATION	904 Moo							Roswell		VM		I-1144
AND	WELL	7		DEGREES 32	MINUTES 58'	SECOND 19.10"		* ACCUBACY	REQUIRED: ONE TEN	TU OF A	SECOND	
N.	LOCATIO (FROM GE	⊢	LATIT	UDE	24"	03.08"	N w	ł.	QUIRED: WGS 84	In or A	SECOND	
NE	<u>`</u>			103				L	·			
1.6	ì				raddress and common vn Unit Location				l, T15S-R35E, Lea			
	WD1222		ļ	NAME OF LICENSED Lee Peterson					NAME OF WELL DR Peterson Drillin	ıg & T	esting, Inc.	
10	DRILLING S 12/11/12			1	DEPTH OF COMPLETE 59.6	WELL (FT)	70	LE DEPTH (FT)	DEPTH WATER FIR	ST ENC	DUNTERED (FT)	
IZ.	COMPLETE	O WELL	ıs: C	artesian	O DRY HOLE	SHALLOW (UNC	ONFINED)	STATIC WATER LEVEL IN COMPLETED WELL (FT)				LL (FT)
TIO	DRILLING FLUID: AIR C MUD ADDITIVES - SPECIFY:											
E.	DRILLING METHOD: ROTARY CHAMMER C CABLE TOOL C OTHER - SPECIFY:											
NFO	DEPTH	(feet b	gl)	BORE HOLE	CASING MATER			ASING	CASING	CAS	SING WALL	SLOT
CASING INFORMATION	FROM TO		DIAM (inches)	GRAI (include each cas note sections	ing string, and	CON	NECTION TYPE	INSIDE DIAM. (inches)	i .	HICKNESS (inches)	SIZE (inches)	
%	0	49.6	<u> </u>	6 1/2	PVC Casing		FJ		2	Sch 40		
DRILLING &	49.6	69.6	<u> </u>	6 1/2	PVC Screening	VC Screening FJ		2	Sch	40	0.010	
3							 		<u> </u>	├		ļ
	<u> </u>	<u> </u>		<u> </u>	<u> </u>		 			 		1
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[' '	ļ	 -		 			<u> </u>			15	SEM -	
!	<u> </u>			 			ļ <u>-</u> -			E		
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				 			<u> </u>			 □	- No.	-
1	Destri	<u> </u>	-15	} _	1.07	UU AD CEAL A	ATTORIAN	A NIC	44401127	7		D 05
1	DEPTH		gi) 'O	BORE HOLE DIAM. (inches)	5	IULAR SEAL M. ICK SIZE-RANG			AMOUNT (cubic feet)	1	MEJINO	IENT
R.	FROM 0	43	<u> </u>	61/2	Grout				` ` `	l	Tremie m	
ANNULAR MATERIAL	43	46		6 1/2	Bentonite Chip	<u> </u>		 			Tremie	
Z.	46	70		6 1/2	8/16 Sand		 -		 	-	Tremie	
13	-	 / °		-	0,10 34.14				 			·
S		 -		 								
		├-		 					—			
(ei		 - -		 	 				 	 [
<u> </u>				L	L. ,			um a	A WELL PECOPE	B 1 00	: (Vani 06/0	970131
	R OSE INTER E NUMBER	KNAL I	USE			POD NUMBER			0 WELL RECORD			0/2012)
						. OD HOMBEN	<u>2</u>					LOF 2
LOC	OCATION PAGE 1 OF 2											

PAGE 2 OF 2

	DEPTH (feet bgl)		COLOR AND TYPE OF MATERIAL ENCOUNTERED -		ESTIMATED
	FROM	то	THICKNESS (feet)	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	YIELD FOR WATER- BEARING ZONES (gpm)
	0	30	30	Tannish White Clayey Sand with Caliche	CYON	gorvee (gp.ii)
1	30	35	5	Tannish Brown Hard Sandstone	OY ON	
ŀ	35	70	35	Tannish Brown Medium to Fine Sugar Sand	OY ON	
				Talimish brown wealann to time sagar sand	- 	
}						
					- V - V	
in:					0 0	
4. HYDROGEOLOGIC LOG OF WELL		<u> </u>			OYON	
10.5					OY ON	
3					OYON	
210					$C_A C_N$	
2					$O^{Y}O^{N}$	
99					O A	
Š.					OY ON	
HYD					$O_A O_N$	
4					OY ON	
					OY ON	
					OY ON	
l		<u> </u>			O Y O N	
		<u> </u>			OY ON	
					32 31	
					$\begin{array}{c c} O & O & N \\ \hline O & O & N \\ \hline \end{array}$	
	METHODI	ISED TO ES	TIMATE VIELD	OF WATER-BEARING STRATA: C PUMP TO	TAL ESTIMATED	_
				u	/ELL YIELD (gpm):	
	AIR LIF		BAILER ()	OTHER – SPECIFY:		
ION	WELL TES	T TEST STAR	RESULTS - ATI T TIME, END TI	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER	DING DISCHARGE I	METHOD, DD.
VISI	MISCELLA	NEOUS IN	FORMATION:			3
ER					길	252
SU						SEE.
TEST; RIG SUPERVIS					J.N.	- E
ST;	DDINT MAA	IT(C) OF D	DILL TIC CLIDE	RVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTI		IANI LICENISEE
5. TE	PRINT NAT	ив(s) Or D	KILL KIG SUPE	(VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTI	COCHONOTHESS.	TAN CHOCK
•					D	
	THE UNDE	RSIGNED I	HEREBY CERTII	FIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF,	THE FOREGOING	A TRUE AND
RE	CORRECT	RECORD O	F THE ABOVE I	DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL REC 20 DAYS AFTER COMPLETION OF WELL DRILLING:	ORD WITH THE STA	TE ENGINEER
TU	AND INE	EKWUI HO	LIER WITHIN.	ODAYS AFTER COMFEETION OF WELL DRILLING.		•
SIGNATURE	<u> </u>		1	- 120 Demon 1	1.21,2	,
S.S.		1	LIL	LEK VELKKEUN	1/6/13	<u> </u>
		SIGNAT	URE OF DRILLI	ER / PRINT SIGNEE NAME	/ DATE	
EO	Oce Grace	NAL HEE		ו ושת. את שענו	RECORD & LOG (Ve	rsion 06/08/20121
	R OSE INTER E NUMBER	ITAL USE		POD NUMBER TRN NUMBER		

LOCATION



WELL RECORD & LOG

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							1	2013 EARL 1 O :	<u>∧ In: ∃(</u>	1	
[OSE POD NU	MBER (WELL	NUMBER)				OSE FILE NU	MBER(S)	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
NO.	MW-3					i	L-13218	PaD3	>		
ATI	WELL OWN						PHONE (OPT)	ONAL)			
,0C	_		Corporation			_					
GENERAL AND WELL LOCATION	904 Moo	er mailing a re Ave	ADDRESS				Roswell	1	STATE NM	88201	-1144
Q A	WELL		DEGREES	MINUTES	SECOND	S				·	
 Y	LOCATIO	N LATE	rude 32	58'	20.90	N	• ACCURACY	REQUIRED: ONE TEN	TH OF A SECON	ND	1
[KA]	(FROM GF		GITUDE 103	24'	03.66"	w	• DATUM RE	QUIRED: WGS 84			
EN	DESCRIPTION			ADDRESS AND COMMO	LANDMARKS - PLS	S (SECTION, TO	IOWNSHJIP, RANG	E) WHERE AVAILABLE			
1.6	Energen	#8-R West	Lovington Strav	wn Unit Location	1980' FSL & 66	60' FWL o	f Section 34	4, T15S-R35E, Lea	County		
1	LICENSE NU	JMBER	NAME OF LICENSED	DRILLER				NAME OF WELL DR			
	WD1222	İ	Lee Peterson					Peterson Drillin	g & Testing	g, Inc.	
	DRILLING S 12/11/12		DRILLING ENDED 2/12/12	DEPTH OF COMPLETE 71.5	O WELL (FT)	BORE HO	LE DEPTH (FT)	DEPTH WATER FIRS	ST ENCOUNTER	RED (FT)	
 	COMPLETE	OWELLIS: (ARTESIAN	O DRY HOLE	SHALLOW (UNCO	STATIC WATER LEVEL IN COMPLETED WELL (F					L (FT)
É	DRILLING FLUID: AIR C MUD ADDITIVES - SPECIFY:										
MA'				C HAMMER C			R - SPECIFY:				-
ğ	DRILLING N					T OTAL	;R - SFECIF1;		 :-		
'Z '	FROM	(feet bgl)	BORE HOLE DIAM	CASING MATER GRAI			ASING NECTION	CASING INSIDE DIAM.	CASING V		SLOT SIZE
CASING INFORMATION	PROM	10	(inches)	(include each cas		1	TYPE	(inches)	(inche	1	(inches)
5						FJ		2	Sch 40		
3	51	51 71	6 1/2	PVC Casing PVC Screeing	·	FJ		2	Sch 40		0.010
	31	 -	0 1/2	7 VC Screenig		'-		†	3011 40		0.070
DRILLING	 		 		-	 		 	<u> </u>		
2.D		 									
		<u> </u>				<u> </u>					
1										_	
			<u> </u>			ļ		↓			
		<u></u>				<u> </u>		<u></u>			
	DEPTH	(feet bgl)	BORE HOLE	1	ULAR SEAL M			AMOUNT		METHO	
AL.	FROM	то	DIAM. (inches)	GRAVEL PA	CK SIZE-RANG	E BY INTI	ERVAL	(cubic feet)		PLACEM	ENT
ERI	0	43	6 1/2	Grout					Trem		
MAT.	43	48	6 1/2	Bentonite Chip	5				Trem		
R.	48	71.5	6 1/2	8/16 Sand					Trem	ie	
ן בון								<u></u>			
ANNULAR MATERIAL					<u> </u>			ļ			
		<u> </u>									
<u> </u>	<u> </u>	<u> </u>			<u></u>			<u></u>			
	R OSE INTER	RNAL USE						WELL RECORD			3/2012)
	E NUMBER				POD NUMBER	3	TRN	NUMBER 51	<u>745</u>		1000
LO	CATION									PAGE	1 Or Z

PAGE 2 OF 2

	DEPTH (feet bgl)	THOUSE	COLOR AT	ND TYPE OF MATERIAL ENCOU	NTERED -	WATER	ESTIMATED YIELD FOR
	FROM	то	THICKNESS (feet)		ER-BEARING CAVITIES OR FRA pplemental sheets to fully describe		BEARING? (YES / NO)	WATER- BEARING
	0	30	30	Tannish White Cl	ayey Sand with Caliche		CY (a) N	ZONES (gpm)
	30	35	5	Tannish Brown H			CYON	
	35	73	38		ledium to Fine Sugar Sand		CY @ N	
							OYON	
							CYCN	
r		-		· · · · · · -			CYCN	
HYDROGEOLOGIC LOG OF WELL		1					OY ON	
OF \					•••		CYON	
90'							OY ON	40
101							OY ONS	% <u>T</u>
007							OY ON	<u>- 65</u>
SEO							OYON	
RO							O Y O YO	: Z
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							CYON	
							$O^{Y}O^{N}$	
	METHOD U	JSED TO ES	TIMATE YIELD	OF WATER-BEARIN	IG STRATA: C PUMP		TAL ESTIMATED	ļ
	C AIR LIF	т 🕑	BAILER (OTHER - SPECIFY:		WE	ELL YIELD (gpm):	
N.	WELL TES				TA COLLECTED DURING WELL HOWING DISCHARGE AND DRA			
TEST; RIG SUPERVISION	MISCELLA	NEOUS INF	ORMATION:					
ERV								
SUF								
RIG								
EST;	PRINTNAN	AF(S) OF D	RILL'RIG SUPE	VISOR(S) THAT PRO	OVIDED ONSITE SUPERVISION C	DE WELL CONSTRI	ICTION OTHER TH	IAN LICENSEE:
S. T.I	I KII I IVA	(IL(B) O. D.	NIED NIO DOI EI	(11001(5) 11111 111	, FIDED CHARLE BOY EN 1910 IV	, well contin		III DICENCEE
THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE A CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGIN								
URE	AND THE	ELWIL HO	DER WITHIN	20 DAYS AFTER COM	PLETION OF WELL DRILLING:	THIS WELL RECO	KD WITH THE STA	I E ENGINEER
۱Ą۲		ノし) ,	_	•			
SIGNATURE	$\sqrt{}$	L	1	- 188 Ve	CE POU		1/2/13	
· (SIGNAT	URE OF DRILLE	ER / PRINT SIGNEE	NAME		DATE	
	R OSE INTER E NUMBER	NAL USE		· · · · · · · · · · · · · · · · · · ·	POD NUMBER	TRN NUMBER	ECORD & LOG (Ve	rsion 06/08/2012)
1					1	1		I.

LOCATION

OSE POD NUMBER (WELL NUMBER)

Energen Resources Corporation WELL OWNER MAILING ADDRESS

WELL OWNER NAME(S)

904 Moore Ave

WELL

LOCATION

(FROM GPS)

LICENSE NUMBER

DRILLING STARTED

DRILLING FLUID:

FROM

49.7

DRILLING METHOD:

DEPTH (feet bgl)

WD1222

12/12/12



MW-4

GENERAL AND WELL LOCATION

DRILLING & CASING INFORMATION

7

WELL RECORD & LOG

MINUTES

DEPTH OF COMPLETED WELL (FT)

58

24

SECONDS

17.54"

04.64"

SHALLOW (UNCONFINED)

ADDITIVES - SPECIFY:

CABLE TOOL

CASING MATERIAL AND/OR

GRADE

(include each casing string, and

note sections of screen)

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DEGREES

NAME OF LICENSED DRILLER

70.2

O DRY HOLE

Омир

C HAMMER

PVC Casing

PVC Screeing

32

Lee Peterson

DRILLING ENDED

LONGITUDE 103

12/13/12

AIR

6 1/2

6 1/2

ROTARY

BORE HOLE

DIAM

(inches)

◉

()

COMPLETED WELL IS: C ARTESIAN

TO

49.7

69.7

STATE ENGINEER OFFICE

L-13218

CITY

N

w

BORE HOLE DEPTH (FT)

OTHER - SPECIFY:

CASING

CONNECTION

TYPE

2

73

 \circ

FJ

FJ

Roswell

2017 JAN 10 1 A 10: 31 1 OSE FILE NUMBER(S PHONE (OPTIONAL) STATE NM 88201-1144 * ACCURACY REQUIRED: ONE TENTH OF A SECOND DATUM REQUIRED: WGS 84 DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE Energen #8-R West Lovington Strawn Unit Location 1980' FSL & 660' FWL of Section 34, T15S-R35£, Lea County NAME OF WELL DRILLING COMPANY Peterson Drilling & Testing, Inc. DEPTH WATER FIRST ENCOUNTERED (FT) STATIC WATER LEVEL IN COMPLETED WELL (FT) CASING CASING WALL SLOT THICKNESS INSIDE DIAM. SIZE (inches) (inches) (inches) 2 Sch 40

Sch 40

0.010

DEPTH (feet bgl) LIST ANNULAR SEAL MATERIAL AND AMOUNT METHOD OF **BORE HOLE** PLACEMENT DIAM. (inches) GRAVEL PACK SIZE-RANGE BY INTERVAL (cubic feet) 3. ANNULAR MATERIAL FROM TO Tremie 6 1/2 Grout 40.5 Tremie 40.5 46 6 1/2 **Bentonite Chips** 46 70.2 6 1/2 8/16 Sand Tremie

	FOR OSE INTERNAL USE			WR-20 WELL RE	CORD & LOG (Ver	sion 06/08/2012)
ſ	FILE NUMBER	POD NUMBER	5	TRN NUMBER	51745	1
Ì	LOCATION					PAGE I OF 2

	DEPTH (feet bgl)		COLOR AND TYPE OF MATERIAL ENCOUNTERED -	U. Amer	ESTIMATED
			THICKNESS	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES	WATER BEARING?	YIELD FOR WATER-
	FROM	то	(feet)	(attach supplemental sheets to fully describe all units)	(YES / NO)	BEARING ZONES (gpm)
	. 0	30	30	Tannish White Clayey Sand with Caliche	CYON	ZONES (gpin)
	30	35	5	Tannish Brown Hard Sandstone	OY @ N	
,	35	73	38	Tannish Brown Medium to Fine Sugar Sand	CYON	
					O Y O N	
					OY ON	
			<u> </u>			
ELL		-	1			
4. HYDROGEOLOGIC LOG OF WELL						
C 0]					C) C)	
07						
ÇIC					$O_A O_N$	
070					C Y O N	
GE($O_A O_N$	
DRC					OYON	
HY					$O_A O_N$	
4					CY CN	:]
					$C_A \in \mathbb{N}$	ST ST
					CY (EN	ns.
					CYCN	四四
					CY C	- GI
					OY OB	THE .
					OYOF	70
	METHOD U	SED TO ES	TIMATE YIELD	"	AL ESTIMATED	17-77
	O AIR LIF	г 💽 і	BAILER (OTHER - SPECIFY: WE	الله (gpm): الله LL YIELD	SEE
	-					<u> </u>
NO	WELL TES	TEST STAR	RESULTS - ATT Γ TIME, END TII	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUD ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER TH	ING DISCHARGE I IE TESTING PERIC	METHOD, D.
VISION	MISCELLA	NEOUS INF	ORMATION:			
ER						
SUF						
S. TEST; RIG SUPERV						
ST;	DDINT NAA	(E/S) OF DI	ZILL DIG SUPER	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRU	ICTION OTHER TH	AN LICENSEE:
5. TE	LUMINAN	ic(3) Or Di	AILL KIG SUI LE	(VISONO) THAT THOUBED ONSTEED EXTISION OF WELL CONSTRU	CHON OTHER TH	AN DICENSEE.
٠.						
-	THE UNDE	RSIGNED H	IEREBY CERTIF	IES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, T	HE FOREGOING IS	A TRUE AND
RE.	CORRECT I	RECORD OF	F THE ABOVE D	ESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECOI 0 DAYS AFTER COMPLETION OF WELL DRILLING:	RD WITH THE STA	TE ENGINEER
SIGNATURE		7	7,		, 4	
IGN	7	-, <u>l</u>	4	Lee Dergannel	1/2/12	
9. S		<u>すい</u> で		DIAL TITLE NAME	1/6/13	
		SIGNAT	UKE OF DRILLE	R / PRINT SIGNEE NAME	DATE	
FOI	R OSE INTER	NAL USE		WR-20 WELL RI	ECORD & LOG (Ve	rsion 06/08/2012)

POD NUMBER

TRN NUMBER

PAGE 2 OF 2

FILE NUMBER

LOCATION



WELL RECORD & LOG

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MW-5	ER (WELL NUMBER)		OSE FILE L-13218	~ ` !		
WELL OWNER	JA NACION		ļ.	PPTIONAL)		- ·
	NAME(S) Sources Corporation	n	PHONE	OF HUNAL)		
_	MAILING ADDRESS		CITY	· · · · · · · · · · · · · · · · · · ·	STATE	ZIP
904 Moore			Roswel	İ		1-1144
WELL	DEC	REES MINUTES SECON	NDS			
LOCATION	LATITUDE 32	58' 16.74"	N ACCUR	ACY REQUIRED: ONE TEN	TH OF A SECOND	
(FROM GPS)	LONGITUDE 103	24' 08.02"	w DATUM	REQUIRED: WGS 84		
DESCRIPTION RE	LATING WELL LOCATION TO	STREET ADDRESS AND COMMON LANDMARKS - P	LSS (SECTION, TOWNSHIJP, R	ANGE) WHERE AVAILABLE		
Energen #8	-R West Lovington !	Strawn Unit Location 1980' FSL &	660' FWL of Section	1 34, T15S-R35E, Lea	a County	
LICENSE NUM	ER NAME OF LICE	SED DRILLER		NAME OF WELL DR	ILLING COMPANY	
WD1222	Lee Peterso	n		Peterson Drillir	ng & Testing, Inc.	
DRILLING STAI 12/12/12	DRILLING END 12/13/12	DEPTH OF COMPLETED WELL (FT) 68	BORE HÖLE DEPTH (1	T) DEPTH WATER FIR	ST ENCOUNTERED (FT)
COMPLETED W	ELLIS: C ARTESIAN	O DRY HOLE SHALLOW (UN	CONFINED)	STATIC WATER LEV	VEL IN COMPLETED WI	ELL (FT)
DRILLING FLU	D:	O MUD ADDITIVES - S	SPECIFY:			
		C HAMMER C CABLETOOL	C OTHER - SPECIF			
DRILLING MET				1;		
DEPTH (fe	DOKETIO	LE CASING MATERIAL AND/OR GRADE	CASING	CASING	CASING WALL	SLOT
FROM	TO DIAM (inches)	(include each casing string, and	CONNECTION	(inches)	THICKNESS (inches)	SIZE (inches)
0 4	7.5 6 1/2	PVC Casing	FJ	2	Sch 40	
47.5	7.5 6 1/2	PVC Screeing	FJ	2	Sch 40	0.010
			<u> </u>			<u> </u>
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			<u> </u>		<u> </u>	
						
 	_				<u> </u>	
			- 		 	
DEPTH (fc	et hall sons va	LIST ANNULAR SEAL	MATERIAL AND	AMOUNT	METHO	D OF
FROM	et bgl) BORE HO DIAM. (inc	CC ((cubic feet)	PLACE	
I I	6 1/2	Grout			Tremie	
	4 61/2	Bentonite Chips	· · · · · · · · · · · · · · · · · · ·		Tremie	
	8 61/2	8/16 Sand			Tremie	
	0772	0.100				

PAGE 2 OF 2

	DEPTH (feet bgi)		COLOR AND TYPE OF MATERIAL ENCOUNTERED -	WATER	ESTIMATED
		~~	THICKNESS	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES	BEARING?	YIELD FOR WATER-
	FROM	ТО	(feet)	(attach supplemental sheets to fully describe all units)	(YES/NO)	BEARING ZONES (gpm)
	0	30	30	Tannish White Clayey Sand with Caliche	OY @ N	
	30	35	5	Tannish Brown Hard Sandstone	CY © N	
	35	71	36	Tannish Brown Medium to Fine Sugar Sand	C Y 💿 N	
ĺ					OYON	
					CYCN	
-					OYON	
HYDROGEOLOGIC LOG OF WELL					CYCN	
OF					O Y	
.007					C Y C N	
1215					OYON	
707					OYON	
SEO					OYON	
RO.					OYON	
1 F			OYON			
4.					OYON	S
					OY ONE	100 E
					CYON	2 200
					OYON	HG HG
					$O^{Y} O^{N}$	证
					$O^{Y} O^{N}$	ER
					$C^{Y}C^{N}$	7 39
	METHOD L	SED TO ES	STIMATE YIELD	*	OTAL ESTIMATED	0. 3. FICE
	O AIR LIF	т 👰	BAILER (OTHER – SPECIFY:	VELL YIELD (gpm):	m 94
z	WELL TES	T TEST STAR	RESULTS - ATT T TIME, END TI	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER	JDING DISCHARGE I THE TESTING PERIC	METHOD, DD.
NOISI	MISCELLA	NEOUS IN	FORMATION:			
TEST; RIG SUPERV	oczaci.	712000 1111				
SUP						
RIG						
ST;		(5(0) 00 0	DV L DIG CURE	NUMBER OF THE TRANSPORT OF THE CHREDWIND OF THE LOCALET	DUCTION OTHER TH	LANTIĞENETE.
S. TE	PRINT NAM	AE(S) OF D	KILL KIG SUPEI	RVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONST	RUCTION OTHER TE	IAN LICENSEE.
"			•			
	THE UNDE	RSIGNED I	HEREBY CERTII	FIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF,	THE FOREGOING IS	S A TRUE AND
RE	CORRECT:	RECORD C	OF THE ABOVE I	DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL REC 20 DAYS AFTER COMPLETION OF WELL DRILLING:	ORD WITH THE STA	TE ENGINEER
SIGNATURE	1	7[)1	_	1 4	
CN	1	· \	AL	- Lee Determi	1/2//:	z
6.5		SIGNAT	TIRE OF DRILL	ER / PRINT SIGNEE NAME	DATE	
		SIGNAL	OKE OF DRILLI	N. 1. MALL OLDING COME	DATE	
FOI	R OSE INTER	NAL USE			RECORD & LOG (Ve	rsion 06/08/2012)
FIL	E NUMBER			POD NUMBER TRN NUMBER		

LOCATION



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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		· · · · · ·								
	OSE POD N	JMBER (WELI	L NUMBER)				OSE FILE NU	MBER(S)		
NO	, ,	VLSU 8R A	ИW-б				L-13218			
ΑŢ		ER NAME(S)					PHONE (OPTI	ONAL)		
0	ENERGE	N RESOUR	RCES CORPORAT	ION						
LL	1	ER MAILING					CITY		STATE	ZIP
GENERAL AND WELL LOCATION	3300 NO	RTH A ST I	BLDG 4 STE 100				MIDLAND)	TX 7970)5
2			DEGREE:	S MINUTE	S SECONI	os	<u> </u>			
¥	LOCATIO		32	58	20	N	* ACCURACY	REQUIRED: ONE TEN	TH OF A SECOND	
₹	(FROM G		ITUDE 32	24	05	w	* DATUM RE	QUIRED: WGS 84		
Z		LON	GITUDE 103				<u></u>			
	1		ELL LOCATION TO STREE							
-	CORNER	OF 17TH /	AND W GUM AV	'E & TURN INTO	GATE FOLLOW	CALICHE	RD. UNIT L,	SEC 34, TWP 159	S, R 35E	
====	LICENSE N	JMBER [NAME OF LICENSED	DRILLER				NAME OF WELL DR	ILLING COMPANY	
	WD-1711	ı	EDWARD BRYA					STRAUB CORPO	DRATION	
	DRILLING S	TARTED	DRILLING ENDED	DEPTH OF COMPLE	TED WELL (FT)	BORE HO	LE DEPTH (FT)	DEPTH WATER FIR	ST ENCOUNTERED (FT))
	9-24-15	1		70'		70'		N/A		
						<u></u>		STATIC WATER LEV	VEL IN COMPLETED WE	ELL (FT)
	COMPLETE	D WELL IS:	C ARTESIAN	C DRY HOLE	SHALLOW (UNC	ONFINED)		N/A		(/
<u>Z</u>				_		· · · · ·				
Y.	DRILLING F	LUID:	♠ AIR	C MUD	ADDITIVES - SP	ECIFY:				
R.	DRILLING N	METHOD:	ROTARY	C HAMMER (CABLE TOOL	С отня	R - SPECIFY:			
E S	DEPTH	(feet bgl)	BORE HOLE	CASING MAT	ERIAL AND/OR		. spic	CASING	CASING WALL	SLOT
8	FROM	то	DIAM	1	ADE		ASING NECTION	INSIDE DIAM.	THICKNESS	SIZE
Sin	İ		(inches)		asing string, and ns of screen)		TYPE	(inches)	(inches)	(inches)
DRILLING & CASING INFORMATION	70'	50'	6"	SCH 40 .010 S		FJ		2"	0.154	.010
હ	50'	+43"	6"	SCH 40 RISER		F)		2"	0.154	RISER
N N	30	173	 	JCIT 40 RISER		' ' ' ' ' ' '			0.134	IUSEIU
E								1		
5. D										1
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						<u> </u>				
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					•					1
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	DEDT	/frat . 1)								
, ,	_	(feet bg!)	BORE HOLE DIAM. (inches)	1	NNULAR SEAL M.			AMOUNT	METHO PLACEN	
I	FROM	ТО	, ,		PACK SIZE-RANG	EBYINIE	RVAL	(cubic feet)		
LEF	70'	48'	6"	11 BAGS OF 2					TOPLOAD	
MA	48'	2'	6"	12 BAG OF 3/8	8 HOLEPLUG				TOPLOAD	
4R										
				-						
ANNULAR MATERIAL										
3. 4										
FOR	OSE INTER	NAL USE					WR-2	0 WELL RECORD	& LOG (Version 06/0	8/2012)
	NUMBER	1 -	13218		POD NUMBER	7		NUMBER 5	70502	
LOC	ATION	M	lan				F.34	,2/3		1 OF 2

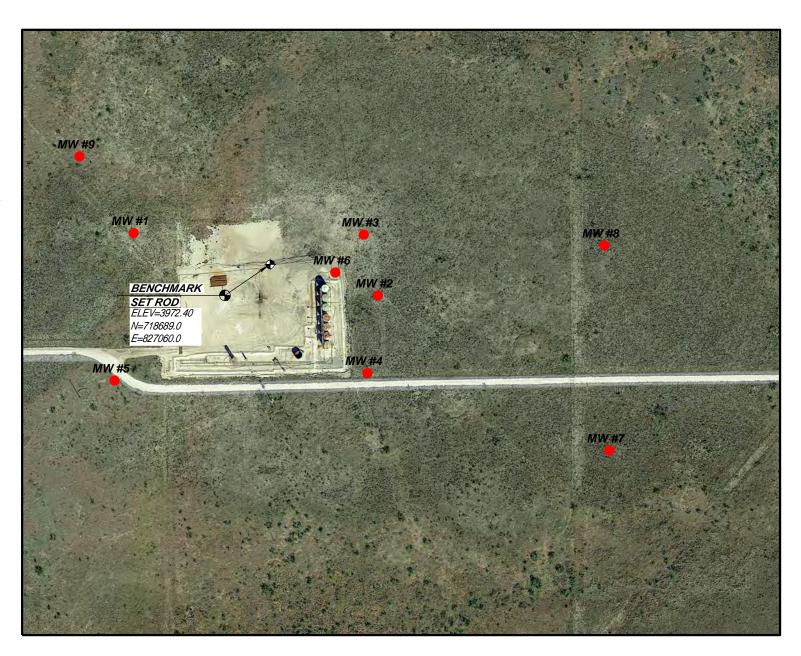
	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING
		21	21	· · · · · · · · · · · · · · · · · · ·	0 V 0 V	ZONES (gpm)
	0	3'	3'	TAN VERY FINE SAND - CALICHE WITH CLAY	CYGN	N/A
	3'	12'	9'	LIGHT TAN VERY FINE SAND - CLAICHE CEMENT SANDSTONE		N/A
	12'	19'	<u> </u>	TAN VERY FINE SAND - SOFT SANDSTONE	CYGN	N/A
ļ	19'	30'	11'	TAN FINE SAND - SILICEOUS SANDSTONE	CYGN	N/A
ļ	30'	61'	31'	TAN VERY FINE SAND - SOFT SANDSTONE	CYEN	N/A
3	61'	70'	9'	TAN VERY FINE SAND	CAGN	N/A
WE	TD	70'			CYEN	N/A
4. HYDROGEOLOGIC LOG OF WELL					$C^{Y} \in \mathbb{N}$	
9 [CACN	
ည်					OY CN	
07					CYCN	
29				·	$C^{Y}C^{N}$	
) 22					CY CN	
<u> </u>					CYCN	
4	,				CY CN	
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ŀ			-		CY CN	
1	•				CYCN	
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					C Y C N	1
}	METHOD I	J ISED TO ES	TIMATE YIELD	OF WATER-BEARING STRATA: C PUMP TO	TAL ESTIMATED	
	C AIR LIF	_	BAILER C	W	ELL YIELD (gpm):	
]	(AIR LIF	1 (BAILEK (OTHER - SPECIFY:		
Z	WELL TES	T TEST STAR	RESULTS - ATT T TIME, END TI	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLU ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER T	DING DISCHARGE THE TESTING PERIO	METHOD, OD.
SIC	MISCELLA	NEOUS IN	ORMATION:			
ER	4X4X60 F					
SUP	2X2 PAD	IIGH MDE				
RIG	LEA COU	MTY NM				
TEST; RIG SUPERVISION			DILL DIC OURE	RVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTR	11CTION OTHER T	UAN I ICENSEE:
	PRINT NAM	ME(S) OF D	RILL RIG SUPE	(VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTR	OCTION OTHER I.	HAN LICENSEE.
5.						
	THE UNDE	RSIGNED I	HEREBY CERTI	FIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF,	THE FOREGOING I	S A TRUE AND
RE	CORRECT	RECORD O	F THE ABOVE I	DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECO 20 DAYS AFTER COMPLETION OF WELL DRILLING:	ORD WITH THE STA	ATE ENGINEER
SIGNATURE	AND THE	ERMIT HO	LDEK WITHIN.	20 DAYS AFTER COMPLETION OF WELL BRILLING.		
GNA	20		2	10 7	looker	
6. SI	_d/	<u> 10.</u>	Dyan_	Edware Brysa	13913	
		SIGNAT	URE ON DRILLI	ER / PRINT SIGNEE NAME	DATE	
FO	R OSE INTER	NAL LISE		WR-20 WELL	RECORD & LOG (V	ersion 06/08/2012)
	E NUMBER		3218	POD NUMBER C TRN NUMBER	57.050	7 二
LOC	CATION	mi	2n	155,35E,34,213		PAGE 2 OF 2

Appendix C

Well Survey Report November 2022







COORDINATE TABLE

COORDINATES VALUES SHOWN ARE RELATIVE TO THE NORTH AMERICAN DATUM 1983, "NEW MEXICO EAST ZONE". ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM 1988

WELL	COORDINATES	ELEVATIONS
MW #1	718754.5 N 826775.5 E	NATURAL GROUND - 3973.05' TOP OF CONCRETE - 3973.15' TOP OF PVC - 3975.52'
MW #2	718624.4 N 827284.4 E	NATURAL GROUND - 3972.55' TOP OF CONCRETE - 3972.52' TOP OF PVC - 3974.76'
MW #3	718751.1 N 827254.9 E	NATURAL GROUND - 3973.86' TOP OF CONCRETE - 3973.92' TOP OF PVC - 3976.67'
MW #4	718462.6 N 827262.2 E	NATURAL GROUND - 3971.80' TOP OF CONCRETE - 3971.91' TOP OF PVC - 3974.52'
MW #5	718446.9 N 826735.6 E	NATURAL GROUND - 3971.78' TOP OF CONCRETE - 3971.82' TOP OF PVC - 3974.43'
MW #6	718672.3 N 827195.6 E	NATURAL GROUND - 3972.74' TOP OF CONCRETE - 3973.13' TOP OF PVC - 3976.17'
MW #7	718301.7 N 827766.4 E	NATURAL GROUND - 3969.65' TOP OF CONCRETE -3969.83 ' TOP OF PVC DEEP -3969.41' TOP OF PVC MEDIUM -3969.43' TOP OF PVC SHALLOW -3969.45'
MW #8	718728.7 N 827755.9 E	NATURAL GROUND - 3969.75' TOP OF CONCRETE - 3970.03' TOP OF PVC DEEP - 3969.29' TOP OF PVC MEDIUM -3969.30' TOP OF PVC SHALLOW -3969.47'
MW #9	718914.0 N 826662.6 E	NATURAL GROUND - 3972.15' TOP OF CONCRETE - 3972.44' TOP OF PVC DEEP - 3971.82' TOP OF PVC MEDIUM -3971.85' TOP OF PVC SHALLOW -3971.80'

SURVEYOR'S CERTIFICATE:

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR
No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE
ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED
WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION;
THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY
MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW
MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY
KNOWLEDGE AND BELIEF.

Monald Midson DATE: 11/18/2022



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SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO HOBBS, N.M. 88240 (575) 393-3117 www.jwsc.biz TBPLS# 10021000

© V:\2022\22110410 MONITOR WELLS\DRAFTING



LEGEND:

DENOTES MONITOR WELL

- DENOTES BENCHMARK 5/8" STL. ROD W/2" A.C.

200 0 200 400 Feet

Scale:1"=200'

DIAMONDBACK ENERGY

MONITOR WELL LOCATIONS IN NW/4 SW/4 SECTION 34, TOWNSHIP 15 SOUTH, RANGE 35 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

ľ	Survey Date	e <i>:</i>	11/16/2022	CAD	Date:	11/17/2022	Dra	awn By:	ACK
J	W.O. No.:	22110410	Rev:	0	Rel. \	W.O.:		Sheet 1	of 1

Appendix D June 2024 Field Notes



Project/Client &W Monitoring 2024/Energen WLSU #8 DBSEA DB22.1348

By: CMB Environmental & beolegica Services, Inc. Tage 2053

Calibrated Hanny Instruments Matti Parameter Probe HI 8819X

Serial # 054000 38101 Fox pt, Conoactivity, Did.

Hanne Quick Calibration Solution

HI 19828-0 Expires 09/2025 230 ML-

Calibrated Hanna Instruments OPTICAL DISSOLVED OXYGEN

meter HI 98798

Serul # 072 101101 Started &W Samply &

10:00 hk-

Left Site @ 16:00 hook

09/22/2024 Arene on-sites 10:30 hr. Began Gw montowny

C10:40 he 011:30 pt, Fc, Oxp meter would not work. Betweened

to Roswell to Repen -

06/23/24 Aprene on-site @ 09004x

Stated 6 W montaxing.

Location Lovington, NM Date 06/20/2024 Project / Client GW Monitoring 2024 / Energen WLSU#8 DBSOA DB22. 1348 By: CMB Environmentale Geological Services, Fre- Page 10+3 ARRIVE on-site ogioohk Cloudy 65 of VIND ESE & Troph-Max wind Gust 10 mph. Humisty 93 % Barometric Pressure 30.28" +4 Sobust I.P. Serial # 350470 Well Drape DTW T.O. Remarks-MW-1 \$ 57.45 71.41 58.6/ 72.11 2"mW mw-2 MW-3 60.15 74.10 211mw \$ 58.33' 72.76' 2" mw mw-4 56.50 70.36 mw-5 2" mw 59.10 73.20 2" mw mw-6 2" mw 55.12 71.60 MW-75 \$ 46-30 dollasped mw Classed by drilled mw-7m 9 54.0 178101 2"mW mw-70 Ø 54.55 72.0 MW-85 \$ 2"mw mw-8m & 54.35 14602 2" mw MW-8D \$ 54.40 192.10 2"mw mw 95 53.08 72.41 mw-9 shallow mw-9M 53.15 145.37 mw-9 middle MW-9D 53.10 192.60 mw-9 Deep

Received by OCD: 10/15/2024 2:45:57 PM

106 Location Lovington, NM Date 06/23/202)
WSWLSU#8 DBS& A DB22. 1348
By: CMB Environmental & Geological Souvices, Inc. Page 3073
18:15 : Finished Gle : Montoning & Energen WLSU#
De-Coy Hobes Prepto Vetury to Roswell. Will
Ship GW Samples in the
Em. Magalla truy.

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email or Fax	: Jary	bec geo-logicion	Project Mai	nager:	119 55-7	The second	16	/	7			15 1/6				
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4	01-11-3 - 40/20-11	itted to Hall Environmental may be sub	omacied to other act	Jedited laboratories	I nis serves as notice of this	possibili	ty. Any	sub-con	tracted d	lata will	be clearly	notated	on the	analytica	report.	

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Type Well MW Production Other	Type of Data ☐ Development ☐ Sampling ☐ Pump Test ☐ Other		Well I Shee of	Well No. Sheet 1 MW-9D of Sheets				
1. Project Energen WCSU#S Gw Montreing 2024	2. Project Location Dias West Loving Ton	Streen Un:	evgy 3. Da	te 06/20/2024				
4. Technician M. Barnhill, P6	Energen Reso	The state of the s	co					
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designat	ion of Rig	9. Loc	pation of Well (Site, Description) onitor Well # 9 Deep				
	Wate	Levels	le - announce de la comme	(II)				
Initial	Final	10 mg 20 mg		Final + 24 Hours				
Date: 12:10	Date: /20/2024 Tim	e: 13:12	Date:	Time:				
10. Total Depth of Well (from TOC)	15. Total Depth of Well	(from TOC)	20. T	otal Depth of Well (from TOC)				
11. Water Level (from TOC) 53,10	16. Water Level (from To 53. /s		21. V	Vater Level (from TOC)				
12. Water Column Height Nor Dia		17.3 Well Volum	es 6 641/045	22. Size and Type of Pump or Bailer				
13. Well Diameter 2" ScH 40 PCM W 14. Well Volume (gal) 22.32 (s) w.e. height)	0.16 0.1534 18.5 Well Volumes 0.65 0.5972 1.47 1.3540 2.61 2.3720 19. Purge Volume		Fallons	Geo-Tech SS Geasup ESP pump 1.8"x3.0 Poly Dispos. Bailen & Twine				
(s) w.e. neight)	Final Fie	ld Analysis	4/1047	Dailer Wine				
27. Final Parameters Time Temp C Conductiv 12:54 20.2/ 577	If yes, source:	5 5315 6	Sampling Person CMB 13 Removed 764/1045	the sample number & Date: nnel? MW-9D, 06/20/29 55 TOMMOSOIS COS/DED/NA Photo Roll #, BTO (gpm) Company Company AMETERS				
28. Physical Appearance and Remarks	- Very Ck							
29. Purgewater disposal method:		ea mountes	6 Take					
	Sampling / Devel							
Time Temp C Conductivity [2:20 19.84 573 12:30 19.70 578 [2:40 1990 572 12:54 20.21 577	7.65 ATUS 7.65 AFO 7.57 Olean H		gallons) Ox	Flow Rate (gpm) pHmv/ORP (gpm) pHmv/				
(1) Note volume and physical character of sedi	-							

Type Well MW Production Other	Type of Data ☐ Development Sampling ☐ Pump Test ☐ Other	Well No. Sheet 1 MW-9M of Sheets
1. Project Energen Wish #8 GW Monitoring 2024		9 3. Date 06/20/2024
Om Barnhill, Pt	Energy Resources Nmoco	
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designation of Rig DSR - 200/	9. Location of Well (Site, Description) Mon Topa Well 9 mid
	Water Levels	V million of train
Initial	Final	Final + 24 Hours
Date: 6/20/24 Time: 11:30	Date/20/24 Time: 12:07	Date: Time:
10. Total Depth of Well (from TOC)	15. Total Depth of Well (from TOC)	20. Total Depth of Well (from TOC)
11. Water Level (from TOC) (16. Water Level (from TOC) 53./2	21. Water Level (from TOC)
	Nom x = gal/ft 17.3 Well Volumes Via Sch 40 Sch 80 44.26	22. Size and Type of Pump or Bailer
13. Well Diameter 2"SCH 40 PVC MW 6	0.65 0.5972 73,776 /	Sallow Geo-Tech SSG-esSu EST PUMP 1.81 ×30' poly PISPO MILLE TINIAL FIN
(s) w.e. height	Final Field Analysis	Mar Marchant M
27. Final Parameters Time Temp C Conduct 11:53 19:50 56	ten pH NTUs WL Remove	Sellow 2:0 Clean Ho
28. Physical Appearance and Remarks		My-cleane Sample.
29. Purgewater disposal method:	In Trailex mounted Truk	
un fre	Sampling / Development Parameters WL Volume	Dissolved Flow Rate
Time Temp C Conductivity 1136 1976 580 110:46 1946 569 11:51 19:54 567 11:53 19:50 569	pH NTUS (from TOC) (gallons) 7-67 3/15/14/19/15/53, 15 Initia 7-60 Clear H20 / 20 7-58 Clear H20 / 30 7-61 Clear H20 53.12 45	Oxygen (gpm) pHmv/0 3.64 2.0 -32.0/ 5.62 2.0 -26.9/ 6.00 1-0 -26.2/- 6.23 2.0 -26.9/-
(1) Note volume and physical character of so NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing	ediments removed.	
Checked By	Mita Mayle Ph	Date 06/20/2024

Type Well MW □ Production □ Other	Type of Data ☐ Development ☐ Sampling ☐ Pump Test ☐ Other		Well No. M Sheet 1 of Shee	w-95
1. Project Energen Wish #8 GW Monitoring 2024-		MONDBACK Errysy h Strown Unit #8	3. Date 06/20	12024
4. Technician CMBarnhill PG	Energen Res	IRP-2457		
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designat	ion of Rig		Well (Site, Description) Well 9 Shallow
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Levels	1 // // //	10.141/00
Initial	Final	LCTCIS	Fin	al + 24 Hours
Date: 6/20/2024 Time: 10:15	Date: 06/20/2024 Time	10:47	Date:	Time:
10. Total Depth of Well (from TOC)	15. Total Depth of Well		20. Total Dep	th of Well (from TOC)
11. Water Level (from TOC), 53.08	16. Water Level (from TO	4	21. Water Lev	rel (from TOC)
12. Water Column Height Non Dia	x = gal/ft Sch 40 Sch 80	x = gal/ft 17.3 Well Volumes		Size and Type of Pump or Bailer
13. Well Diameter 2" 2" 2" 4" 6" 14. Well Volume (gal) 3.0928 8"	0.15 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes 15. 464 Gall 19. Purge Volume 10. Gallous	FST	Tech 5'S GeoSch Dumpa 'X3.0' poly Dispose low of Twine For Ser
		ld Analysis		
23. Total Amount of Water Removed 10 Callons N	y? No Yes	If yes, v Samplir	what was the sam	er Sampled (Yes) No ple number & Date: W 9 Sha 110 W 921 C 10:40 BJ AND SOL
27. Final Parameters Time Temp C Conductivi 10'37 19.70 642	7.46 Cles	Us WL Removed 53.08 10 Gallo	Flow Rate (gpm)	Photo Roll #, Observations Clean 1/20
28. Physical Appearance and Remarks		TAKE PH AND CONDUCTIV		
29. Purgewa <mark>ter di</mark> sposal method:	IN Trail	lep mounted B		
	Sampling / Develo	opment Parameters	5: 1	
Time Temp C Conductivity 10:30 20.78 10.86 10:32 19.77 669 10:34 19.77 478 10:37 19.69 642 10:37 19.70 642	7-10 Brownsit 7-58 Clear the 7-45 Clear the 7-40 Clear the 7-46 Clear the	WL (from TOC) (gallons) 53.08, Tn:tial 2.5 5.0 7.5 0.53.08 10.0	Dissolved Oxygen 5.69 8.29 6.53 6.55	Flow Rate (gpm) pHmv/ORP 1:66 -3.9 -40, 1:66 -17.9 -40, 1:66 -18.2 -3, 1:66 -21.1 -3,
(1) Note volume and physical character of sedi NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing	ments removed.			-

Type Well ✓ MW □ Production □ Other	Type of Data ☐ Development ☐ Sampling ☐ Pump Test. ☐ Other		Well No. Sheet 1 / Sheet	7W-8D ets
1. Project Energen WLSUFE SW MONITORING 2024		amor o Back Ene. Ton Strawn Unit	794 3. Date 06/	23/2024
4. Technician Om Bernhill, PG	Energy Res	OUVERS NMOC		
7. Method Pumping Surging Air Lift Railing Other	8.Manufacturer's Designa	tion of Rig		Well (Site, Description)
	Wate	r Levels		
Initial	Final	100	Fin	al + 24 Hours
Date:/23/24 Time: 14:15	Date: /23/24 Tim	e: 15:25	Date:	Time:
10. Total Depth of Well (from TOC)	15. Total Depth of Well	(from TOC)	20. Total Dep	oth of Well (from TOC)
11. Water Level (from TOC) 54.40	16. Water Level (from T		21. Water Le	vel (from TOC)
	om x = gal/ft a Sch 40 Sch 80	17.3 Well Volumes		Size and Type of Pump or Bailer
13. Well Diameter 2 "SCIF 40 PVC MW 6" 14. Well Volume (gal) 22.03 8"	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes //0 . 16 19. Purge Volume	Gollons Se	Tech Geosulo Est Te 145 poly Disposed les & Twine
27. Final Parameters Time Temp C Conducti	No Yes No If yes, source:	If you Sam Om, Us WL Remo	Se TPHI	ple number & Date: W - & D , 06/23/24 map & St/5 GPo Date MRO & Photo Roll #, Ch/6 te Observations
15:00 22:13 64 IF PETROLEUM 28. Physical Appearance and Remarks	7.52 Cle MISINTHE WELL, DO NOT CLERK F	TAKE pH AND CONDUC	TIVITY PARAMETER	elean Az
29. Purgewater disposal method:	- American	Mounted 1		
Time Temp C Conductivity 14: 26 25.3 612 14:36 22:23 618 14:46 21:35 626 15:00 22:13 647	7.44 Class 7.44 Har 7.53 Clear Har 7.53 Clear Har 7.53 Clear Har	opment Parameters WL Volum (from TOC) (gallor 54.40 Ind 1	ne Dissolved	Flow Rate (gpm) pHmv/ORP 2.0 -21.6/-5.3 2.0 -23.6/-3 2.0 -20.5/
NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing Checked By	after Mount	li, Pt	Date	06/23/2024 ad in USA by AOP. Inc. • (575) 624-2700 • AOP #47562

Type Well	Type of Data ☐ Development ☐ Sampling ☐ Pump Test ☐ Other	t	Well No. MW-8M Sheet 1 of Sheets
1. Project Energen WLSU#8 GW Monitoring 2024	West Lovington	Strawy Unit #8	
4. Technician M/Barnhill, PC	Energen Kes	RP-2457	
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designa DSR - 2	tion of Rig	9. Location of Well (Site, Description) Monitor Well 8 middle
	- Value	r Levels	
Initial	Final		Final + 24 Hours
Date: /23/24 Time: 13:08	Date: /23/24 Tim		Date: Time:
10. Total Depth of Well (from TOC)	15. Total Depth of Well	(from TOC)	20. Total Depth of Well (from TOC)
11. Water Level (from TOC) 54-35	16. Water Level (from T	(4.35°	21. Water Level (from TOC)
	om x = gal/ft	17.3 Well Volumes 44.0 Ga	22. Size and Type of Pump or Bailer
13. Well Diameter 2" SCH 40 PVC MW 6" 14. Well Volume (gal) 14.667 8"	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes 73. 33 G2 19. Purge Volume 45 62	GeoTech GeoSub Es
Fallons 27. Final Parameters Time Temp C Conduct 13:43 21-13 588	No Tryes, source: vity pH NT 7-47 Cle	Samplin	loss 2.0 Chear
28. Physical Appearance and Remarks		n the	
29. Purgewater disposal method:	In Trail	len Mounted	Tank
Time Temp C Conductivity 18:19 22.58 590 13:27 21:46 584 13:35 21:48 591 13:43 21:13 585 (1) Note volume and physical character of see	7.45 chear 7.45 chear 7.50 ffga 7.49 Chearthy 7.41 Clearthy	opment Parameters WL Volume (from TOC) (gallons) 54.35 In. Fie 15 30 54.35 45	Dissolved Flow Rate Oxygen (gpm) pHmv/ORP 5.04 2.0 -21.0/-/ 6-87 2.0 -22.9/-/ 6-77 2.0 -21.0/-/ 7.16 20 -21.2/-
NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing Checked By	Aston Mone	n-Pf	Date 06/25/3024 Printed In USA by AOP 10c. • (575) 624-2760 • AOP #47562

Type Well MW Production Other	Type of Data ☐ Development ☐ Sampling ☐ Pump Test. ☐ Other		Well No. Sheet 1 of Sheets	1W-8S
1. Project Energey Wish #8 W Manitoxing 2024 4. Technician	West Lovingto	esources Nucco	x 061	23/2024
Cm Barnhill, PG	Case # 1.	RP-2457		
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designat	The state of the s		ell (Site, Description) Well 8 Shallow
	Wate	r Levels		-1-1100
Initial	Final	The state of the s	Final	+ 24 Hours
Date: 12:06	Date:/23/24 Tim	e: 12:58	Date:	Time:
0. Fotal Depth of Well (from TOC) フス・ひ	15. Total Depth of Well	(from TOC)	20. Total Depth	of Well (from TOC)
11. Water Level (from TOC) 54.55/	16. Water Level (from T	oc) -55	21. Water Leve	I (from TOC)
12. Water Column Height No Dia		17. 3 Well Volumes 8-376 G	- 1	ze and Type of Pump or Bailer
13. Well Diameter 2" SCH 40 PVC MW 6" 6" 8"	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes 13. 96 19. Purge Volume	Geor	Tech Geo Sub Es 2 70' poly Disposi ica & Tuine
27. Final Parameters Time Temp C Conductive 12:38 21-59 582		Us WL Remove	ed Flow Rate (gpm)	Photo Roll #, Observations TUPEN Ch
28. Physical Appearance and Remarks	TURBIP E	Your Fine Si	ispended.	5:11
9. Purgewater disposal method:			ink	
unter	Sampling / Devel	opment Parameters WL Volume	Dissolved	Flow Rate
Time Temp C Conductivity 12:28 27:45 61/ 12:30 23:54 718 12:32 21:90 629 12:34 21:72 597 12:34 21:81 59/ 12:38 21:65 582	7.38 Back St 7.37 11 11 11 7.46 Wasin 7.44 11 11 11 7.54 Tresin 7.43 11 11 11	(from TOC) (gallons) 54-55 Infra 2 4 6 14 8 54-55 10		(gpm) pHmv/ORP $ \begin{array}{ccccccccccccccccccccccccccccccccccc$
Note volume and physical character of sed TU = Nephelometric turbidity units Water Level from Top of PVC Casing	iments removed.			
Checked By	1 10/0 100	a. o.	Date	1/20

Type Well ☑ MW □ Production □ Other	Type of Data ☐ Development ☐ Sampling ☐ Pump Test ☐ Other			NW- 7D eets
1. Project Energen WLSU#8 SW Maituring 2024	West Lovinsto.	2. Project Location Diamons Back Energy West Lovinston Strawn Unit #8		123/24
4. Technician Im Barnhill, Ph	Energen Q NMOCD Cas	exIRP-2	457	
7. Method Cumping Surging Air Lift Bailing Other	8.Manufacturer's Designat	ion of Rig	9. Location of	of Well (Site, Description) FOR Well #7 Dee
	Water	Levels	1 1	
Initial	Final		F	inal + 24 Hours
Pate: /23/24 Time: 16:53	Date: /23/24 Time		Date:	Time:
0. Total Depth of Well (from TOC)	15. Total Depth of Well	(from TOC)	20. Total De	epth of Welf (from TOC)
1. Water Level (from TOC) 54.0	16. Water Level (from T)	DC)	21. Water L	ever (from TOC)
2. Water Column Height No.		n x = gal/ft 17.3 Well Volumes		Size and Type of Pump or Bailer
3. Well Diameter 2" 4" 4" 4" 4. Well Volume (gal) 19-8416 8"	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes 9 9- 20 19. Purge Volume	ballous S	Potach SSGEOSULE etc 1401 8"x3.0' Poly Pispo Bailea For Sample
s) w.e. height)	Final Fie	ld Analysis	5011045 /	soiler For sample
Gallons		If you	es, what was the sa pling Personnel?	ater Sampled 4es No imple number & Date: MW-7D, 06/23/2 PH MW 80/5 & DE Photo Roll #, 87
Pr. Final Parameters Time Temp C Conduction 17:34 20:95 770	7.73 Clea	att 0 55.10' 60	bellows 2:0	Gpm Clean And
IF PETROLEUM 28. Physical Appearance and Remarks	a is in the well, do not Clear	1	TIVITY PARAMET	ERS
9. Purgewater disposal method:	In Warler	mounted To	rek	
	Sampling / Devel	opment Parameter		
Time Temp C Conductivity 17:04 22.01 632 17:14 21.22 745 17:24 21.09 7:63 17:34 20.95 778	7.85 Clear Har 7.78 Clear Har 7.96 Clear Har 7.13 (Lear Har	WL (from TOC) (gallor 54.0 In 14.0		Flow Rate (gpm) pHmv/ORP 2.0 -12.7/- 2.0 -32.1/-16 2.0 -37.8/-
Note volume and physical character of security NTU = Nephelometric turbidity units NL = Water Level from Top of PVC Casing	diments removed.			

Type Well		☐ Development Sampling ☐ Pump Test ☐ Other		MW-7M Sheets
1. Project Energen WLSU # &	1 . / _ /		, / /	oclash
6 W Monitoring 202	+ West Loving			06/23/2024
CM Barnhill, Pt	Energen Re	IRP-24	57	
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designa DS Z - 20		A STATE OF THE PARTY OF THE PAR	on of Well (Site, Description) on UCI #7 Middle
	Wate	r Levels		
Initial	Final			Final + 24 Hours
Date: 23/24 Time: 16:30	Date: Tim	ne:	Date:	Time:
10. Fotal Depth of Well (from TOC)	15. Total Depth of Welf	(Mom TOC)	20. Tota	Depth of Well (from TOC)
11. Water Level (from TOC)	16. Water Level (from T	road	21. Wate	er Level (from TOC)
12, Water Column Height N	om $x = gal/ft$ ia $8ch 40$ Sch 80	17. 3 Well Volumes		22. Size and Type of Pump or Bailer
13. Well Diameter 2 SCUYO PVC MW 6 14. Well Volume (gal) (s) w.e. height)	0.65 0.5972 1.47 1.3540	0.65 0.5972 1.47 1.3540		NA
(s) w.e. neight)	Final Fie	eld Analysis		
27. Final Parameters Time Temp C Conduct	No If yes, source:	Us WL Re	Sampling Personnel (S) 1 Mg emoved Flow (9)	Pluggrd & 46-3 Photo Roll #, 7 W Rate Observations
28. Physical Appearance and Remarks	This well was	s dameges	By the	L DRIVICE
29. Purgewater disposal method;	Casing Bloc	Ket/Coll	laspet a	46.30' Fro
	Sampling / Deve	lopment Paramet		
Time Temp C Conductivity	pH NTUs		llume Dissolv Illons) Oxyge	
	$=\mathcal{H}$			
		A		
(1) Note volume and physical character of se NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing	ediments removed.		_	
Checked By	all for The	in Po	Da	tte 06/33/2023 Printed in USANDY AOP, Inc. + (576) 624-2700 • AOP #A7

Type Well MW Production Other	Type of Data Development Sampling Pump Test Other	☐ Development ☐ Sampling ☐ Pump Test		No. MW - 75 Sheets
1. Project Energey Wisu #8 GW Monitoring 2024 4. Technician	West Loving T Energen Res	Justrawn Un	hite	06/23/2024
CM Barnhill, PG		RP-2457		
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designa			cation of Well (Site, Description)
Company of the Line States	USR-	2001		Monton Well #7 Shallow
and the second s		r Levels	1	
Initial	Final			Final + 24 Hours
Date: /23/24 Time: /5:42	Date: /23/24 Tim	e: 16:25	Date:	/ Time:
10. Total Depth of Well (from TOC)	15. Total Depth of Well		20, 1	Total Depth of Well (from TOC)
11. Water Level (from TOC) 55.12	16. Water Level (from T	00)	21. \	Nater Level (from TOC)
12. Water Column Height No Die	x = gal/ft	17. 3 Well Volume	6allons	22. Size and Type of Pump or Bailer
13. Well Diameter 2"SCH 40 PVC mW 14. Well Volume (gal) 2.63 8"	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volume 13. 15	es	GeoTech SS GeoSub E. Set = 70 1. 81 x 3.0' poly Dispo Boiler
28. Physical Appearance and Remarks	TOLLIO FIN	US WL R 20 53.15 TAKE PH AND COND TAKE PH AND COND TO SUSPENDE	Sampling Person MBa 16 MBa 16 We emoved 8 Gallous DUCTIVITY PAR	
29. Purgewater disposal method:	In Traile	e mounted	Tank	
Time Temp C Conductivity 15:58 20:50 805 16:00 20:43 818 16:02 20:43 819 16:04 20:44 801 16:06 20:05 807 (1) Note volume and physical character of sec NTU = Nephelometric turbidity units	Sampling / Devel PH Title T	WL V	olume Diss allons) Ox	solved Flow Rate (gpm) pHmv/ORP (G3 1.0 -16.8/-13.30 1.0 -16.9/3.78 1.0 -18.9/4.8 (Gpm) pHmv/ORP
WL = Water Level from Top of PVC Casing Checked By	Major Male	- Pt		Date 06/23/2024 Printed in USA by AOP, Inc. • (575) 624-2700 • AOP #47562

Type Well ☑ Horoduction ☑ Other	☐ Development		Sheet	mw−6 eets
1. Project Energy Wish #8 EW Monitoring 2024	West Lovingto	2. Project Location DIDMOND Back Energy 3 West Lovington Strawn Unit #3		6/20/2024
4. Technician MBarnhill, BC	Energey Reso	P-2457		
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designat	ion of Rig		of Well (Site, Description)
The state of the s	Water	Levels		A TABLE OF THE PARTY OF THE PAR
Initial	Final	LCVCIO	F	inal + 24 Hours
Date: 15:00	Date: 06/2-0/24 Time	: 15:40	Date:	/ Time:
10. Total Depth of Well (from TOC)	15. Total Depth of Well		20. Total De	epth of Well (from TOC)
11. Water Level (from TOC) 59. 10	16. Water Level (from To		21. Water L	evel (from TOC)
12. Water Column Height No Dis	Sch 40 Sch 80	x = gal/ft 17.3 Well Volumes		Size and Type of Pump or Baller>
13. Well Diameter 2"Scrt 40 PVC M W 6" 14. Well Volume (gal) 2,256 (s) w.e. height)	0.16 0.1534 18.5 Well Volumes 0.5972 1.47 1.3540 2.61 2.3720 19. Purge Volume.			posable Bailea é Twine
s) w.e. height)	Final Fia	Id Analysis	19	
7 Gallons 27. Final Parameters Time Temp C Conductive 15:33 19:60 399	1	Us WL Remove WHYD T Gallo TAKE PH AND CONDUCT!	d Flow R (gpm // 0/2 VITY PARAMETI	ERS Clear H20
29. Purgewater disposal method:		er mounted 7		(
	Sampling / Devel	opment Parameters		
Time Temp C Conductivity 15:10 19:35 37:39 15:17 19:84 3947 15:22 19:39 3974 15:33 19:60 3997	ph NTUs 7.53 Has 7.57 Clear Has 7.58 Clear Has 7.56 Clear Has	WL (from TOC) (gallons) 5 9, 10 India	Dissolved Oxygen 6.55 6.68 6.3/	Flow Rate (gpm) pHmv/ORP 0.25 - 25.8/-2 0.25 - 28.1/-4 0.25 - 27.3/-2
(1) Note volume and physical character of sec	liments removed.	-		-

Type Well	Type of Data ☐ Developmen ☐ Sampling ☐ Pump Test ☐ Other		Well No. MW-5 Sheet 1 Sheets
1. Project Energey WLSU #8 GW Monitoring 2024 4. Technician	West Lovings	amono Each Energy You Strawn Unit #	21/- /
4. Technician CM Baruhill, Pt	Energen Bes	Souces, NMOCD 1RP-2457	
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designa DSR-2	tion of Rig	9. Location of Well (Site, Description) Monitor Well #5
		r Levels	
Initial	Final	Mary Control of the C	Final + 24 Hours
Date: 06/20/2024 Time: 14:1/	Date: 06/20/2024 Tim	ne: 14: 50	Date: Time:
10. Total Depth of Well (from TOC) 70.36	15. Total Depth of Well		20. Total Depth of Well (from TOC)
11. Water Level (from TOC) / 56.50	16. Water Level (from T	oci , 50 '	21. Water Level (from TOC)
12. Water Column Height Nor Dia		17.3 Well Volumes	22. Size and Type of Pump of Bailer
13. Well Diameter 2" SCW 40 PVC MW 6" 14. Well Volume (gal) 2, 2/76 (s) w.e. height)	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes // 0 88 6 a // 19. Purge Volume (4. 15 64 //	- TOSUL Dallea
(a) w.c. neight	Final Fie	eld Analysis	-47
6.15 Gallons		If yes, Sample	as the Groundwater Sampled Yes No what was the sample number & Date: ing Personnel? MW-5,06/20/2024 14:42 Thum 008015 620/020/MA
27. Final Parameters Time Temp C Conductiv 14:40 18:47 (14)	7,37 SIN	Us WL Remove	d Flow Rate Observations
IF PETROLEUM 28. Physical Appearance and Remarks		TÁKÉ PH AND CONDUCTI	
29. Purgewater disposal method:	IN Traile	a mounted	Tank
ia	Sampling / Devel	opment Parameters	
Time Temp C Conductivity 14:20 19:13 616 14:27 18:99 613 14:33 19:02 615 14:40 18:97 614	7.40 How 150 7.36 Shishtly 7.34 11 11 7.37 Shight	WL (from TOC), (gallons) 56.50	Dissolved Oxygen (gpm) pHmv/ORP 8.28 0.25 -17.3/-18.56 0.25 -15.9/-18.56 0.25 -15.9/-18.56 0.25 -15.9/-18.56
(1) Note include and about all the second and a second about a second a second about a second about a second about a second about a second a			
(1) Note volume and physical character of sedi NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing	ments removed.	3	12
Checked By	Mitanon	in Pf	Date 06/20/2024 Printed in USA by AOP, life • (575) 624-2700 • AOP #47

CMB ENVIRONMENTAL & GEOLOGICAL SERVICES, INC. - WELL DATA FORM

Type Well MW Production Other	Type of Data Developmen Sampling Pump Test Other	☐ Development ☐ Sampling ☐ Pump Test		No. MW-4 et 1 Sheets
1. Project Energen Wisk #8 GW Monitoxing 2024	2. Project Location De West Laving		/	ate 06/22/2024
4. Technician M. Barnh: 11. PC	Energey Res	souvces NA	uoco	7/000.4
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designa	tion of Rig	9. Lo	cation of Well (Site, Description) Non I a Well #4
	DSR-3	r Levels		removed vogit
Initial	Final	Levels		Final + 24 Hours
Date: 23/2024 Time: /0:39	Date: 123/2024 Tim	e: 0953	Date:	
10. Total Depth of Well (from TOC)	15. Total Depth of Well		20. 1	Total Depth of Well (from TOC)
11. Water Level (from TOC) 58.33'	16. Water Level (from J	8.31	21.1	Nater Level (from TOC)
12. Water Column Height No Dia	m x = gal/ft	17. 3 Well Volu	mes 26 Gallous	22. Size and Type of Pump of Bailer
13. Well Diameter 2"SCH 40 PVC MW 6" 14. Well Volume (gal) 2.3088 8"	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volu 11- 5 19. Purge Volun	mes 4 Gallons	1.8" ×3.0' poly Disposable Boiler - Twine
	Final Fie	ld Analysis		
23. Total Amount of Water Removed 7 Gallans 24. Was W Pumped D Yes 27. Final Parameters Time Temp C Conductive C94V 19.7V 10.46	of If yes, source:	Us WL	If yes, what was Sampling Perso Cimbo 094 Removed	oundwater Sampled & No sthe sample number & Date: nnel? MW-4 C6/22/2024 THYMOD 801 C DRO SPO / NO Photo Roll #, 1877 Flow Rate Observations & C4, 1879
	IS IN THE WELL, DO NOT	TAKE pH AND CO		U. A.
29. Purgewater disposal method:	In Trailer	mounted	Tank	
	Sampling / Devel			
75 Time Temp C Conductivity 76:78 21:14 981 992 19:54 997 19:72 10:76 9947 19:72 10:76	1.30 Clear Hy 7.30 Clear Hy 7.50 Clear Hy 7.30 Plage	WL (from TOC) 58, 33	(gallons) Ox	solved Flow Rate (gpm) pHmv/ORP (gpm) pHmv/ORP (3.8/-65.26
(1) Note volume and physical character of sed NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing	iments removed.			
Checked By	Mytaning	an o	g.	Date 56 32 202 4 Printed in USA by AOP, Inc. • (575) 624-2700 • AOP, 847562

Type Well MW Production Other	Type of Data ☐ Development ☐ Sampling ☐ Pump Test ☐ Other		Well No. MW-3 Sheet 1 of / Sheets
1. Project Energy Wish #8	2. Project Location Dea		90% 3. Date
5W Monitoring 2024 4. Technician	West Loving		
Om Baunhill, PE		RP-2457	
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designati	ion of Rig	9. Location of Well (Site, Description) Monton Wen #3
		Levels	
Initial	Final		Final + 24 Hours
Date:/22/24 Time: 1/201)	Date: /23/2024	11:43	Date: Time:
10. Total Depth of Well (from TOC)	15. Total Depth of Well ((from TOC)	20. Total Depth of Well (from TOC)
11. Water Level (from TOC)	16. Water Level (from TC	60.16	21. Water Level (from TOC)
12. Water Column Height , No. Dia		17. 3 Well Volumes	22. Size and Type of Pump of Bailer
13. Well Diameter 2	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes	Sollong Disposelle 21
	Final Fiel	ld Analysis	
Gallows	No Yes No If yes, source:	If y San	Was the Groundwater Sampled Ses No es, what was the sample number & Date: npling Personnel? MW-3, 06/23/24 Ball:30 PH map & Roll Photo Roll #, /3
27. Final Parameters Time Temp C Conductive 11.24 19.60 6.48	1/	4Hy 6016 6	15 (gpm) Slightly &
28. Physical Appearance and Remarks	Clash Inti		
29. Purgewater disposal method:	In track	a Mounted	Tanle
2	Sampling / Develo	opment Parameter	
Time Temp C Conductivity 1:06 19.59 8.75 11:13 19.53 6.43 11:19 19.31 6.46 11:29 19.60 6.48	7.38 Clear H. D. 7.38 Slishfly Turbib	(from TOC) (gallor 60.15) Find 4	
(1) Note volume and physical character of sec NTU = Nephelometric turbidity units WL = Water Level from Top of PVC Casing Checked By	diments removed.	WAL	Date 0/2/23/2024

Type Well ☑*MW ☐ Production ☐ Other	Type of Data ☐ Development ☐ Sampling ☐ Pump Test ☐ Other	Well No Sheet of				
Project Energen WLSU#8 Sw Montoring 2024	2. Project Location Diamond. West Lovington Stran	//	3. Date 06/23/2024			
Technician Earnhill, Pa	Energen Resources Case # 1RP-	NMOCD				
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designation of Rig	9. Loca	tion of Well (Site, Description)			
And Section 1	Water Leve		only or over			
Initial	Final		Final + 24 Hours			
Date: 10:06	Date:/23/24 Time: 10:	Date:	/Time;			
0. Total Depth of Well (from TOC)	15. Total Depth of Well (from TO	20. To	tal Depth of Well (from TOC)			
1. Water Level (from TOC) 58.6/	16. Water Level (from TOC) 58.63	21. Wa	ater Level (from TOC)			
2. Water Column Height N	om $x = gal/ft$ 17.3	Well Volumes 6.48 Gallogs	22. Size and Type of Pump or Baller			
3. Well Diameter 2. "SCH 40 PVC M W 4. Well Volume (gal) 2. 16 8. we. height)	0.65 0.5972 1.47 1.3540	Well Volumes 10 - 8 8 6 allows rge Volume _	Disposable Bailer			
s) w.e, height)	Final Field Ana	6.56 ellons	- I wine			
27. Final Parameters Time Temp C Conduct 10:45 19:59 47	MIS IN THE WELL, DO NOT TAKE PH	NL Removed FI 8.53 G-5 Gellins AND CONDUCTIVITY PARA	ow Rate Observations Class			
29. Purgewater disposal method:		Mount of Tex	K			
10 10 10 10 10 10 10 10 10 10 10 10 10 1	Sampling / Developmen					
Time Temp C Conductivity 10:09 19.94 4630 10:18 19.55 4401 10:24 19.41 4626 10:35 19.59 4719	PH OVER (from T 7.38 OVER 58.6) 7.42 FINE SIF 7.37 THE SIF 7.36 II II II 58.6	Volume Disso	A CONTRACT OF THE PROPERTY OF			
1) Note volume and physical character of se NTU = Nephelometric turbidity units NL = Water Level from Top of PVC Casing Checked By	diments removed.		Date 06 /23/2/12 Printed in 05A by AQP, Inc. • (575) 624/2700 • AQP #47562			

Type Well MW Production Other	Type of Data ☐ Development ☑ Sampling ☐ Pump Test ☐ Other		Well N Sheet of	1 /1/1			
1. Project Energen WLSU #8 EW Mantoning 2024	2. Project Location Dias West Loving to			3. Date 06/20/2024			
4. Technician CMBarahill, PG	Energey Res	sources NMOC		, , , , , , , , , , , , , , , , , , , ,			
7. Method Pumping Surging Air Lift Bailing Other	8.Manufacturer's Designa DSR - 20	tion of Rig		9. Location of Well (Site, Description) Monitor Well # /			
		r Levels	- June - 1	And the same of th			
Initial	Final			Final + 24 Hours			
Date: 06/20/2024 Time: 13:24	Date: 06/20/24 Tim	e: 14:08	Date:	/ Time:			
10. Total Depth of Well (from TOC)	15. Total Depth of Well		20. To	otal Depth of Well (from TOC)			
11. Water Level (from TOC) 57.45	16. Water Level (from T		21. W	ater Level (from TOC)			
12. Water Column Height Nor Dia	m x = gal/ft	17.3 Well Volumes	1	22. Size and Type of Pump of Bailer			
13. Well Diameter 2" SCITYO PVC MW 6" 14. Well Volume (gal) 2.233((s) w.e. height)	0.16 0.1534 0.65 0.5972 1.47 1.3540 2.61 2.3720	18. 5 Well Volumes	01/045	1.8" x 3.0 poly Disposable Bailea è Twine			
27. Final Parameters Time Temp C Conductive 13:57 19:6/ 632		Us WL Rei 01257.41 6:	moved F 75 64/1013	Photo Roll #, Objections (gpm) Questions (gpm) Observations (METERS			
29. Purgewater disposal method:		ex mounted	r				
Time Temp C. Conductivity 13.35 19.45 623 13.42 19.38 636 (3.47 19.27 624 13.57 19.61 632 (1) Note volume and physical character of sed NTU = Nephelometric turbidity units	7.4/ Property 1.3/ Clear Hy		ume Dissortions) Oxy And The Transport Transp				
WL = Water Level from Top of PVC Casing Checked By	(Mysting	Jun Pb		Date 06 /26/2024 Printed in USA by AOP, Inc. • (575) 624-2700 • AOP #47565			

Appendix E

June 2024 Laboratory Report



Attn: Mr. John Ayarbe Daniel B. Stephens & Associates Inc. 6020 Academy Road NE Suite 100 Albuquerque, New Mexico 87109

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JOB DESCRIPTION

Diamond Back Energy Energy WLSU #8

JOB NUMBER

885-6908-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

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Authorized for release by John Caldwell, Project Manager john.caldwell@et.eurofinsus.com (505)345-3975 2

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10

44

Client: Daniel B. Stephens & Associates Inc. Project/Site: Diamond Back Energy

Laboratory Job ID: 885-6908-1 SDG: Energy WLSU #8

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QC Sample Results	22
QC Association Summary	27
Lab Chronicle	30
Certification Summary	34
Chain of Custody	35
Receipt Checklists	37

2

3

4

6

8

9

10

Definitions/Glossary

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

3

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**

Detection Limit (DoD/DOE) DL

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 MI Minimum Level (Dioxin) Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive **Quality Control** 0C

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 Albuquerque

Job ID: 885-6908-1

Case Narrative

Client: Daniel B. Stephens & Associates Inc.

Project: Diamond Back Energy

Job ID: 885-6908-1

Eurofins Albuquerque

Job Narrative 885-6908-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 6/25/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.9°C and 4.4°C.

Gasoline Range Organics

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

GC/MS VOA

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

Diesel Range Organics

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.

Eurofins Albuquerque

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Client Sample Results

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

Lab Sample ID: 885-6908-1 **Client Sample ID: MW-9 Shallow** Date Collected: 06/20/24 10:40

Matrix: Water

Result ND ND ND ND ND	Compound Qualifier	0.050 Limits 70-130 ds (GC/MS) RL 1.0 1.0 1.0 1.5 Limits	mg/L Unit ug/L ug/L ug/L ug/L	<u>D</u>	Prepared Prepared Prepared	Analyzed 07/04/24 08:06 Analyzed 07/04/24 08:06 Analyzed 07/03/24 20:23 07/03/24 20:23 07/03/24 20:23 07/03/24 20:23	Dil Fac
98 Organic (Result ND ND ND ND ND ND Recovery	Compound Qualifier	70-130 ds (GC/MS) RL 1.0 1.0 1.0 1.5	ug/L ug/L ug/L	<u> </u>	<u> </u>	07/04/24 08:06 Analyzed 07/03/24 20:23 07/03/24 20:23 07/03/24 20:23	1 1
Prganic (Result ND ND ND ND ND Recovery	Qualifier	ds (GC/MS) RL 1.0 1.0 1.0 1.5	ug/L ug/L ug/L	<u> </u>	Prepared	Analyzed 07/03/24 20:23 07/03/24 20:23 07/03/24 20:23	1 1 1
Result ND ND ND ND ND	Qualifier	1.0 1.0 1.0 1.0	ug/L ug/L ug/L	<u>D</u>	Prepared	07/03/24 20:23 07/03/24 20:23 07/03/24 20:23	Dil Fac 1 1 1
ND ND ND ND		1.0 1.0 1.0 1.5	ug/L ug/L ug/L	<u>D</u>	Prepared	07/03/24 20:23 07/03/24 20:23 07/03/24 20:23	1 1 1
ND ND ND	Qualifier	1.0 1.0 1.5	ug/L ug/L			07/03/24 20:23 07/03/24 20:23	1 1 1
ND ND Recovery	Qualifier	1.0 1.5	ug/L			07/03/24 20:23	1 1 1
ND Recovery	Qualifier	1.5	.				1
Recovery	Qualifier		ug/L			07/03/24 20:23	1
	Qualifier	Limita					
400		LIIIIIIS			Prepared	Analyzed	Dil Fac
102		70 - 130				07/03/24 20:23	1
101		70 - 130				07/03/24 20:23	1
99		70 - 130				07/03/24 20:23	1
100		70 - 130				07/03/24 20:23	1
ange Org	ganics (DF	RO) (GC)					
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
ND		1.0	mg/L		06/27/24 15:29	07/01/24 14:19	1
ND		5.0	mg/L		06/27/24 15:29	07/01/24 14:19	1
Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
122		46 - 159			06/27/24 15:29	07/01/24 14:19	1
R	99 100 nge Org Result ND ND ecovery	99 100 nge Organics (DF Result Qualifier ND ND ND ecovery Qualifier	99 70 - 130 100 70 - 130 nge Organics (DRO) (GC) Result Qualifier RL ND 1.0 ND 5.0 ecovery Qualifier Limits 122 46 - 159	99 70 - 130 100 70 - 130 nge Organics (DRO) (GC) Result Qualifier RL Unit ND 1.0 mg/L ND 5.0 mg/L ecovery Qualifier Limits 122 46 - 159	99 70 - 130 100 70 - 130 nge Organics (DRO) (GC) Result Qualifier RL Unit D ND 1.0 mg/L ND 5.0 mg/L ecovery Qualifier Limits 122 46 - 159	99 70 - 130 100 70 - 130 nge Organics (DRO) (GC) Result Qualifier RL Unit mg/L 06/27/24 15:29 ND 5.0 mg/L 06/27/24 15:29 ecovery Qualifier Limits Prepared 06/27/24 15:29	99 70 - 130 07/03/24 20:23 100 70 - 130 07/03/24 20:23 nge Organics (DRO) (GC) Result Qualifier RL Unit D Prepared 06/27/24 15:29 07/01/24 14:19 ND 1.0 mg/L 06/27/24 15:29 07/01/24 14:19 ND 5.0 mg/L 06/27/24 15:29 07/01/24 14:19 recovery Qualifier Limits Prepared 06/27/24 15:29 07/01/24 14:19 recovery Qualifier Limits Prepared 06/27/24 15:29 07/01/24 14:19

10

29

mg/L

06/29/24 12:19

Chloride

Job ID: 885-6908-1 SDG: Energy WLSU #8

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Date Received: 06/25/24 10:00

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Lab Sample ID: 885-6908-2

07/03/24 20:52

07/03/24 20:52

Matrix: Water

Client Sample ID: MW-9 Middle Date Collected: 06/20/24 12:00

Method: SW846 8015D - Nonh	alogenated	Organics	using GC/MS -	Modified (Gas	oline R	ange Orga	nics)	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 09:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				07/04/24 09:19	1

Method: SW846 8260B - Vo	olatile Organic	Compound	ds (GC/MS)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/03/24 20:52	1
Ethylbenzene	ND		1.0	ug/L			07/03/24 20:52	1
Toluene	ND		1.0	ug/L			07/03/24 20:52	1
Xylenes, Total	ND		1.5	ug/L			07/03/24 20:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 130				07/03/24 20:52	1
Toluene-d8 (Surr)	100		70 - 130				07/03/24 20:52	1

70 - 130

70 - 130

100

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 14:31	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 14:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	123		46 - 159			06/27/24 15:29	07/01/24 14:31	1

Method: EPA 300.0 - Anions, Id	on Chromatography						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33	10	mg/L			06/29/24 12:44	20

2

7

10

11

Client Sample Results

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Client Sample ID: MW-9 Deep Date Collected: 06/20/24 13:00

SDG: Energy WLSU #8

06/29/24 13:33

Job ID: 885-6908-1

Lab Sa	ample	ID:	885-	6908-3
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Matrix: Water

Method: SW846 8015D - Nonh	_	_	using GC/MS -M	lodified (Gas	oline	Range Orgar	nics)	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 09:44	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 09:44	
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		1.0	ug/L			07/03/24 21:21	
Ethylbenzene	ND		1.0	ug/L			07/03/24 21:21	
Toluene	ND		1.0	ug/L			07/03/24 21:21	
Xylenes, Total	ND		1.5	ug/L			07/03/24 21:21	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				07/03/24 21:21	
Toluene-d8 (Surr)	99		70 - 130				07/03/24 21:21	
4-Bromofluorobenzene (Surr)	98		70 - 130				07/03/24 21:21	
Dibromofluoromethane (Surr)	99		70 - 130				07/03/24 21:21	
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 14:44	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 14:44	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	136		46 - 159			06/27/24 15:29	07/01/24 14:44	
Method: EPA 300.0 - Anions, I	on Chroma	tography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

10

mg/L

35

Chloride

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Client Sample ID: MW-1 Date Collected: 06/20/24 14:00

Job ID: 885-6908-1 SDG: Energy WLSU #8

Matrix: Water

Lab	Sample	ID: 885-6908-4	
		Matelia Mater	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 10:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				07/04/24 10:08	1
Method: SW846 8260B - Volati	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/03/24 21:49	1
Ethylbenzene	ND		1.0	ug/L			07/03/24 21:49	1
Toluene	ND		1.0	ug/L			07/03/24 21:49	1
Xylenes, Total	ND		1.5	ug/L			07/03/24 21:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				07/03/24 21:49	1
Toluene-d8 (Surr)	101		70 - 130				07/03/24 21:49	1
4-Bromofluorobenzene (Surr)	99		70 - 130				07/03/24 21:49	1
Dibromofluoromethane (Surr)	102		70 - 130				07/03/24 21:49	1
Method: SW846 8015D - Diese	el Range Or	ganics (DR	(C) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 14:56	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 14:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	132		46 - 159			06/27/24 15:29	07/01/24 14:56	1

10

28

mg/L

06/29/24 14:23

Chloride

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

Lab Sample ID: 885-6908-5

Matrix: Water

CI	ient	Sa	ım	рI	e	ID	V	I۷	V.	-5	
_											

Date Collected: 06/20/24 14:42

Method: SW846 8015D - Nonh Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L		<u>.</u>	07/04/24 10:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130				07/04/24 10:32	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 03:04	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 03:04	1
Toluene	ND		1.0	ug/L			07/04/24 03:04	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 03:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130				07/04/24 03:04	1
Toluene-d8 (Surr)	100		70 - 130				07/04/24 03:04	1
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 03:04	1
Dibromofluoromethane (Surr)	102		70 - 130				07/04/24 03:04	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 15:09	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 15:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	134		46 - 159			06/27/24 15:29	07/01/24 15:09	1
Method: EPA 300.0 - Anions, I	on Chroma	tography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	28		10	mg/L			06/29/24 14:47	20

Job ID: 885-6908-1 SDG: Energy WLSU #8

Client: Daniel B. Stephens & Associates Inc. Project/Site: Diamond Back Energy

Client Sample ID: MW-6
Date Collected: 06/20/24 15:35
Date Received: 06/25/24 10:00

Dibromofluoromethane (Surr)

Lab Sample ID: 885-6908-6

07/04/24 03:32

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 10:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130		•		07/04/24 10:57	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 03:32	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 03:32	1
Toluene	ND		1.0	ug/L			07/04/24 03:32	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 03:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
			70 - 130				07/04/24 03:32	1
1,2-Dichloroethane-d4 (Surr)	103		10 - 130					
1,2-Dichloroethane-d4 (Surr) Toluene-d8 (Surr)	103 98		70 - 130 70 - 130				07/04/24 03:32	1

Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 15:21	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	126		46 - 159			06/27/24 15:29	07/01/24 15:21	1
Method: EPA 300.0 - Anions,	on Chroma	tography						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	980		50	mg/L			07/03/24 13:17	100

70 - 130

102

5

3

F

7

8

10

11

Job ID: 885-6908-1 SDG: Energy WLSU #8

Client: Daniel B. Stephens & Associates Inc. Project/Site: Diamond Back Energy

Client Sample ID: MW-4

Lab Sample ID: 885-6908-7

Matrix: Water

Onch	t Ou	IIIPIC			• •
Date C	olled	cted: (06/23	/24	09:4

	Received:		
Date	iteceivea.	00/25/24	10.00

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 11:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				07/04/24 11:22	
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		1.0	ug/L			07/04/24 04:01	
Ethylbenzene	ND		1.0	ug/L			07/04/24 04:01	
Toluene	ND		1.0	ug/L			07/04/24 04:01	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 04:01	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				07/04/24 04:01	
Toluene-d8 (Surr)	99		70 - 130				07/04/24 04:01	1
4-Bromofluorobenzene (Surr)	99		70 - 130				07/04/24 04:01	
Dibromofluoromethane (Surr)	103		70 - 130				07/04/24 04:01	
Method: SW846 8015D - Diese	el Range Or	ganics (DR	(C) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 15:34	
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 15:34	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	130		46 - 159			06/27/24 15:29	07/01/24 15:34	
Method: EPA 300.0 - Anions,	on Chroma	tography						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	140		10	mg/L			06/29/24 16:26	20

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Client Sample ID: MW-2

Date Collected: 06/23/24 10:40

Job ID: 885-6908-1 SDG: Energy WLSU #8

SDG. Ellergy WLSU #6

Lab Sample ID: 885-6908-8

Matrix: Water

Method: SW846 8015D - Nonh	_	_	using GC/MS -N	lodified (Gas	oline		iics)	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 11:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				07/04/24 11:46	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 04:29	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 04:29	1
Toluene	ND		1.0	ug/L			07/04/24 04:29	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 04:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130				07/04/24 04:29	
Toluene-d8 (Surr)	99		70 - 130				07/04/24 04:29	1
4-Bromofluorobenzene (Surr)	100		70 - 130				07/04/24 04:29	1
Dibromofluoromethane (Surr)	104		70 - 130				07/04/24 04:29	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 16:01	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 16:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Di-n-octyl phthalate (Surr)	128		46 - 159			06/27/24 15:29	07/01/24 16:01	

RL

50

Result Qualifier

1300

Unit

mg/L

Prepared

Analyzed

07/08/24 09:55

Dil Fac

100

Analyte

Chloride

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

Prepared

06/27/24 15:32 07/01/24 16:14

Analyzed

Dil Fac

Client Sample ID: MW-3

Lab Sample ID: 885-6908-9

Matrix: Water

Date Collected: 06/23/24 11:30 Date Received: 06/25/24 10:00

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 12:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130				07/04/24 12:11	1
Method: SW846 8260B - Volati	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 04:58	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 04:58	1
Toluene	ND		1.0	ug/L			07/04/24 04:58	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 04:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				07/04/24 04:58	1
Toluene-d8 (Surr)	100		70 - 130				07/04/24 04:58	1
4-Bromofluorobenzene (Surr)	96		70 - 130				07/04/24 04:58	1
Dibromofluoromethane (Surr)	103		70 - 130				07/04/24 04:58	1
Method: SW846 8015D - Diese	l Range Or	ganics (DR	RO) (GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:32	07/01/24 16:14	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:32	07/01/24 16:14	1

Method: EPA	300.0 - Anions	s, Ion Chromatograph	ıv

%Recovery Qualifier

126

Surrogate

Di-n-octyl phthalate (Surr)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27	10	mg/L			06/29/24 17:16	20

Limits

46 - 159

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

SDG: Energy WLSU #8

Lab Sample ID: 885-6908-10

Job ID: 885-6908-1

Client Sample ID: MW-8 Shallow Date Collected: 06/23/24 12:40 Date Received: 06/25/24 10:00

Matrix: Water

Method: SW846 8015D - Nonh Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L		<u>.</u>	07/04/24 12:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				07/04/24 12:35	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 05:27	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 05:27	1
Toluene	ND		1.0	ug/L			07/04/24 05:27	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 05:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				07/04/24 05:27	1
Toluene-d8 (Surr)	100		70 - 130				07/04/24 05:27	1
4-Bromofluorobenzene (Surr)	100		70 - 130				07/04/24 05:27	1
Dibromofluoromethane (Surr)	102		70 - 130				07/04/24 05:27	1
Method: SW846 8015D - Diese	el Range Or	ganics (DR	(O) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:32	07/01/24 16:27	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:32	07/01/24 16:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	131		46 - 159			06/27/24 15:32	07/01/24 16:27	1
Method: EPA 300.0 - Anions, I	on Chromat	tography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		10	mg/L			06/29/24 17:40	20

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Client Sample ID: MW-8 Middle

Analyte

Dibromofluoromethane (Surr)

Lah Sample ID: 885-6908-11

Prepared

Matrix: Water

Dil Fac

Job ID: 885-6908-1

SDG: Energy WLSU #8

Lab Sample ID: 885-6908-11

Analyzed

07/04/24 05:55

Date Collected: 06/23/24 13:45
Date Received: 06/25/24 10:00

Result Qualifier

103

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 13:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				07/04/24 13:00	1

RL

Unit

Benzene	ND ND	1.0	ug/L		07/04/24 05:55	1
Ethylbenzene	ND	1.0	ug/L		07/04/24 05:55	1
Toluene	ND	1.0	ug/L		07/04/24 05:55	1
Xylenes, Total	ND	1.5	ug/L		07/04/24 05:55	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103	70 - 130			07/04/24 05:55	1
Toluene-d8 (Surr)	99	70 - 130			07/04/24 05:55	1
4-Bromofluorobenzene (Surr)	96	70 - 130			07/04/24 05:55	1

70 - 130

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:32	07/01/24 16:40	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:32	07/01/24 16:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	124		46 - 159			06/27/24 15:32	07/01/24 16:40	1
. , ,								
Method: EPA 300.0 - Anions,	lon Chromat	tography						
Method: EPA 300.0 - Anions, Analyte		tography Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Daniel B. Stephens & Associates Inc. Job ID: 885-6908-1 Project/Site: Diamond Back Energy SDG: Energy WLSU #8

Lab Sample ID: 885-6908-12 **Client Sample ID: MW-8 Deep**

Date Collected: 06/23/24 15:05 **Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 13:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				07/04/24 13:24	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 06:24	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 06:24	1
Toluene	ND		1.0	ug/L			07/04/24 06:24	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 06:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				07/04/24 06:24	1
Toluene-d8 (Surr)	96		70 - 130				07/04/24 06:24	1
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 06:24	1
Dibromofluoromethane (Surr)	103		70 - 130				07/04/24 06:24	1
Method: SW846 8015D - Diese	el Range Or	ganics (DR	(O) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:32	07/01/24 16:54	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:32	07/01/24 16:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	129		46 - 159			06/27/24 15:32	07/01/24 16:54	1
Method: EPA 300.0 - Anions, I	on Chromat	tography						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		10	mg/L			06/29/24 18:54	20

Date Collected: 06/23/24 16:15

Date Received: 06/25/24 10:00

Motor Oil Range Organics [C28-C40]

Di-n-octyl phthalate (Surr)

Surrogate

Client Sample Results

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

06/27/24 15:32 07/01/24 17:07

06/27/24 15:32 07/01/24 17:07

Analyzed

Dil Fac

Prepared

Client Sample ID: MW-7 Shallow Lab Sample ID: 885-6908-13

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 13:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 13:49	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 06:52	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 06:52	1
Toluene	ND		1.0	ug/L			07/04/24 06:52	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 06:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				07/04/24 06:52	1
Toluene-d8 (Surr)	99		70 - 130				07/04/24 06:52	1
4-Bromofluorobenzene (Surr)	95		70 - 130				07/04/24 06:52	1
Dibromofluoromethane (Surr)	104		70 - 130				07/04/24 06:52	1
Method: SW846 8015D - Diese	el Range Org	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:32	07/01/24 17:07	1

Method: EPA 300.0 - Anions, Id	on Chromatograph	าง					
Analyte	Result Qualifier	r RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69	10	mg/L			06/29/24 19:19	20

Limits

46 - 159

5.0

mg/L

ND

%Recovery Qualifier

134

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

SDG: Energy WLSU #8

Lab Sample ID: 885-6908-14

Matrix: Water

Client Sample ID: MW-7 Deep
Date Collected: 06/23/24 17:40
Date Received: 06/25/24 10:00

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 14:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 14:14	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 07:21	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 07:21	1
Toluene	ND		1.0	ug/L			07/04/24 07:21	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 07:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				07/04/24 07:21	1
Toluene-d8 (Surr)	97		70 - 130				07/04/24 07:21	1
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 07:21	1
Dibromofluoromethane (Surr)	104		70 - 130				07/04/24 07:21	1
Method: SW846 8015D - Diese	el Range Org	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:32	07/01/24 17:20	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:32	07/01/24 17:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	123		46 - 159			06/27/24 15:32	07/01/24 17:20	1
Method: EPA 300.0 - Anions, I	on Chromat	tography						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73	-	10	mg/L			06/29/24 19:44	20

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

Sample ID: 995 0009 45

Client Sample ID: MW-7 Shallow Duplicate

Date Collected: 06/23/24 16:15
Date Received: 06/25/24 10:00

Lab Sample ID: 885-6908-15

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 14:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 14:38	1
Method: SW846 8260B - Volat	ile Organic	Compound	ds (GC/MS)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 07:49	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 07:49	1
Toluene	ND		1.0	ug/L			07/04/24 07:49	1
Xylenes, Total	ND		1.5	ug/L			07/04/24 07:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130				07/04/24 07:49	1
Toluene-d8 (Surr)	99		70 - 130				07/04/24 07:49	1
4-Bromofluorobenzene (Surr)	97		70 - 130				07/04/24 07:49	1
Dibromofluoromethane (Surr)	106		70 - 130				07/04/24 07:49	1
Method: SW846 8015D - Diese	el Range Or	ganics (DF	RO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:32	07/01/24 17:33	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:32	07/01/24 17:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	127		46 - 159			06/27/24 15:32	07/01/24 17:33	1

RL

10

Unit

mg/L

Prepared

Analyzed

06/29/24 20:09

Dil Fac

Result Qualifier

75

Analyte

Chloride

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1

SDG: Energy WLSU #8

Client Sample ID: Field Blank Lab Sample ID: 885-6908-18 Date Collected: 06/23/24 18:15

103

100

97

104

Matrix: Water

Duto	oonootoa.	00/20/27 10:10
Date	Received:	06/25/24 10:00

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Analyte	Result Q	ualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		0.050	mg/L			07/04/24 15:03	
Surrogate	%Recovery Q	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	98		70 - 130				07/04/24 15:03	-
	tile Organic Co Result Q	•	Is (GC/MS) RL	Unit	D	Prepared	Analyzed	Dil Fa
Method: SW846 8260B - Volat Analyte	•	•	,	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	•	•	,	Unit ug/L	<u>D</u>	Prepared	Analyzed 07/04/24 08:18	Dil Fac
Analyte Benzene	Result Q	•	RL		<u> </u>	Prepared		Dil Fac
Analyte	Result Q	•	1.0 RL	ug/L	<u> </u>	Prepared	07/04/24 08:18	Dil Fac
Analyte Benzene Ethylbenzene	Result Q ND ND	•	1.0 1.0	ug/L ug/L	<u>D</u>	Prepared	07/04/24 08:18 07/04/24 08:18	Dil Fa

70 - 130

70 - 130

70 - 130

70 - 130

Analyzed	Dil Fac	
07/04/24 08:18	1	
07/04/24 08:18	1	
07/04/24 08:18	1	

07/04/24 08:18

Client: Daniel B. Stephens & Associates Inc. Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

Prep Type: Total/NA

Client Sample ID: Method Blank

Client Sample ID: MW-9 Shallow

Prep Type: Total/NA

Method: 8015D - Nonhalogenated Organics using GC/MS -Modified (Gasoline Range Organics)

Lab Sample ID: MB 885-7932/3

Matrix: Water

Analysis Batch: 7932

-	MB	MB						
Analyte Gasoline Range Organics [C6 - C10]	Result ND	Qualifier	RL		<u>D</u>	Prepared	Analyzed 07/04/24 07:42	Dil Fac
Cassimo rango organiso (co o roj	МВ	МВ	0.000	g /L			01/01/21 01:12	·

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 07/04/24 07:42 4-Bromofluorobenzene (Surr) 97

Lab Sample ID: LCS 885-7932/2 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 7932

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits 70 - 130 Gasoline Range Organics [C6 -0.500 0.445 mg/L 89

C10]

LCS LCS

Limits Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 106 70 - 130

Lab Sample ID: 885-6908-1 MS Client Sample ID: MW-9 Shallow Prep Type: Total/NA

Matrix: Water

Analysis Batch: 7932

Sample Sample Spike MS MS %Rec Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits 0.500 49 - 136 Gasoline Range Organics [C6 -ND 0.446 89 mg/L

C10]

MS MS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 109 70 - 130

Lab Sample ID: 885-6908-1 MSD

Matrix: Water

Analysis Batch: 7932

Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec 0.500 0.439 88 49 - 136 Gasoline Range Organics [C6 -ND mg/L 20

C10]

MSD MSD

Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 107

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-7872/30 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 7872

-	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/04/24 02:35	1
Ethylbenzene	ND		1.0	ug/L			07/04/24 02:35	1
Toluene	ND		1.0	ug/L			07/04/24 02:35	1

Eurofins Albuquerque

Prep Type: Total/NA

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

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

Lab Sample ID: MB 885-7872/30 Client Sample ID: Method Blank Prep Type: Total/NA **Matrix: Water**

Analysis Batch: 7872

	IVIB IVIB	MB						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Xylenes, Total	ND ND	1.5	ug/L			07/04/24 02:35	1	

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102	70 - 130		07/04/24 02:35	1
Toluene-d8 (Surr)	99	70 - 130		07/04/24 02:35	1
4-Bromofluorobenzene (Surr)	101	70 - 130		07/04/24 02:35	1
Dibromofluoromethane (Surr)	101	70 - 130		07/04/24 02:35	1

Lab Sample ID: MB 885-7872/4 Client Sample ID: Method Blank **Prep Type: Total/NA Matrix: Water**

Analysis Batch: 7872

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			07/03/24 13:12	1
Ethylbenzene	ND		1.0	ug/L			07/03/24 13:12	1
Toluene	ND		1.0	ug/L			07/03/24 13:12	1
Xylenes, Total	ND		1.5	ug/L			07/03/24 13:12	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Dil Fac Analyzed 1,2-Dichloroethane-d4 (Surr) 07/03/24 13:12 Toluene-d8 (Surr) 07/03/24 13:12 4-Bromofluorobenzene (Surr) 07/03/24 13:12 Dibromofluoromethane (Surr) 07/03/24 13:12

Lab Sample ID: LCS 885-7872/29 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 7872

-	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	20.1	22.4		ug/L		111	70 - 130	
Toluene	20.2	22.2		ug/L		110	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
Toluene-d8 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130

Lab Sample ID: LCS 885-7872/3 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 7872

7 maryolo Batom 1012	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	20.1	23.0		ug/L		114	70 - 130	
Toluene	20.2	22.9		ug/L		114	70 - 130	

Job ID: 885-6908-1 Project/Site: Diamond Back Energy SDG: Energy WLSU #8

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

Lab Sample ID: LCS 885-7872/3 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 7872

	LCS	LCS		
Surrogate	%Recovery	Qualifier	Limits	
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	
Toluene-d8 (Surr)	99		70 - 130	
4-Bromofluorobenzene (Surr)	102		70 - 130	
Dibromofluoromethane (Surr)	101		70 130	

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

Lab Sample ID: MB 885-7523/1-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA

Analysis Batch: 7694

	MB	MB					•	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0	mg/L		06/27/24 15:29	07/01/24 13:54	1
Motor Oil Range Organics [C28-C40]	ND		5.0	mg/L		06/27/24 15:29	07/01/24 13:54	1

MB MB Surrogate %Recovery Qualifier

Limits Prepared Analyzed Dil Fac Di-n-octyl phthalate (Surr) 46 - 159 06/27/24 15:29 07/01/24 13:54 133

Lab Sample ID: LCS 885-7523/2-A **Client Sample ID: Lab Control Sample**

Matrix: Water

Analysis Batch: 7694							Prep	Batch: 7523
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics	2.50	2.75		mg/L		110	57 - 147	

[C10-C28]

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
Di-n-octvl phthalate (Surr)	120	46 - 159

Lab Sample ID: 885-6908-15 MS Client Sample ID: MW-7 Shallow Duplicate **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 7694

•	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics	ND		2.50	2.76		mg/L		110	33 - 161	

[C10-C28]

	MS MS	
Surrogate	%Recovery Qualifier	Limits
Di-n-octyl phthalate (Surr)	117	46 159

Lab Sample ID: 885-6908-15 MSD Client Sample ID: MW-7 Shallow Duplicate **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 7694									Prep	Batch:	7523
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics	ND		2.50	2.57		mg/L		103	33 - 161	7	20

[C10-C28]

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Prep Batch: 7523

Prep Type: Total/NA

Prep Batch: 7523

Project/Site: Diamond Back Energy

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 885-6908-15 MSD **Matrix: Water**

Analysis Batch: 7694

Di-n-octyl phthalate (Surr)

Client Sample ID: MW-7 Shallow Duplicate Prep Type: Total/NA

Prep Batch: 7523

MSD MSD

123

%Recovery Qualifier

Limits 46 - 159

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-7768/4

Matrix: Water

Surrogate

Analysis Batch: 7768

MB MB

Analyte

Chloride ND

Result Qualifier

0.50

Spike

Added

5.00

Spike

Added

0.500

Spike

Added

5.00

RL

LCS LCS

MRL MRL

0.543

RL

0.50

Result Qualifier

4.64

Result Qualifier

Unit mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

D Prepared

> D %Rec

D %Rec

D

93

109

Prepared

%Rec

qq

06/29/24 11:05

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

Analyzed

Prep Type: Total/NA

Client Sample ID: Method Blank

%Rec

Limits

90 - 110

%Rec

Limits

50 - 150

Client Sample ID: Method Blank

Analyzed

07/03/24 10:35

Client Sample ID: Lab Control Sample

Dil Fac

Lab Sample ID: LCS 885-7768/5 Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Water

Analysis Batch: 7768

Analyte

Chloride

Lab Sample ID: MRL 885-7768/3 **Matrix: Water**

Analysis Batch: 7768

Analyte

Chloride

Lab Sample ID: MB 885-7923/4

Matrix: Water

Analysis Batch: 7923

MB MB

Analyte Result Qualifier Chloride ND

Lab Sample ID: LCS 885-7923/5

Matrix: Water

Analyte

Chloride

Analysis Batch: 7923

Chloride Lab Sample ID: MRL 885-7923/3

Matrix: Water

Analysis Batch: 7923

Analyte

Added 0.500

Spike

MRL MRL Result Qualifier 0.555

LCS LCS

4.93

Result Qualifier

D %Rec

%Rec Limits 50 - 150

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

%Rec

Limits

90 - 110

QC Sample Results

Spike

Added

5.00

Spike

Added

0.500

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec

Limits

90 - 110

Client Sample ID: Lab Control Sample

Analyzed

07/08/24 08:45

SDG: Energy WLSU #8

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-8058/4

Matrix: Water

Analysis Batch: 8058

MB MB

Analyte Result Qualifier RL Chloride ND

Lab Sample ID: LCS 885-8058/5 **Matrix: Water**

Analysis Batch: 8058

Analyte

Chloride

Lab Sample ID: MRL 885-8058/3 **Matrix: Water**

Analysis Batch: 8058

Analyte Chloride

Unit 0.50 mg/L

0.547

LCS LCS

Result Qualifier 4.70

Unit

MRL MRL

Result Qualifier Unit mg/L

mg/L

D

Prepared

D %Rec

94

%Rec 109

%Rec Limits 50 - 150

QC Association Summary

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

GC/MS VOA

Analysis Batch: 7872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
885-6908-1	MW-9 Shallow	Total/NA	Water	8260B	
885-6908-2	MW-9 Middle	Total/NA	Water	8260B	
885-6908-3	MW-9 Deep	Total/NA	Water	8260B	
885-6908-4	MW-1	Total/NA	Water	8260B	
885-6908-5	MW-5	Total/NA	Water	8260B	
885-6908-6	MW-6	Total/NA	Water	8260B	
885-6908-7	MW-4	Total/NA	Water	8260B	
885-6908-8	MW-2	Total/NA	Water	8260B	
885-6908-9	MW-3	Total/NA	Water	8260B	
885-6908-10	MW-8 Shallow	Total/NA	Water	8260B	
885-6908-11	MW-8 Middle	Total/NA	Water	8260B	
885-6908-12	MW-8 Deep	Total/NA	Water	8260B	
885-6908-13	MW-7 Shallow	Total/NA	Water	8260B	
885-6908-14	MW-7 Deep	Total/NA	Water	8260B	
885-6908-15	MW-7 Shallow Duplicate	Total/NA	Water	8260B	
885-6908-18	Field Blank	Total/NA	Water	8260B	
MB 885-7872/30	Method Blank	Total/NA	Water	8260B	
MB 885-7872/4	Method Blank	Total/NA	Water	8260B	
LCS 885-7872/29	Lab Control Sample	Total/NA	Water	8260B	
LCS 885-7872/3	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 7932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
885-6908-1	MW-9 Shallow	Total/NA	Water	8015D	<u> </u>
885-6908-2	MW-9 Middle	Total/NA	Water	8015D	
885-6908-3	MW-9 Deep	Total/NA	Water	8015D	
885-6908-4	MW-1	Total/NA	Water	8015D	
385-6908-5	MW-5	Total/NA	Water	8015D	
385-6908-6	MW-6	Total/NA	Water	8015D	
385-6908-7	MW-4	Total/NA	Water	8015D	
885-6908-8	MW-2	Total/NA	Water	8015D	
885-6908-9	MW-3	Total/NA	Water	8015D	
885-6908-10	MW-8 Shallow	Total/NA	Water	8015D	
885-6908-11	MW-8 Middle	Total/NA	Water	8015D	
885-6908-12	MW-8 Deep	Total/NA	Water	8015D	
885-6908-13	MW-7 Shallow	Total/NA	Water	8015D	
885-6908-14	MW-7 Deep	Total/NA	Water	8015D	
885-6908-15	MW-7 Shallow Duplicate	Total/NA	Water	8015D	
885-6908-18	Field Blank	Total/NA	Water	8015D	
MB 885-7932/3	Method Blank	Total/NA	Water	8015D	
CS 885-7932/2	Lab Control Sample	Total/NA	Water	8015D	
885-6908-1 MS	MW-9 Shallow	Total/NA	Water	8015D	
885-6908-1 MSD	MW-9 Shallow	Total/NA	Water	8015D	

GC Semi VOA

Prep Batch: 7523

Released to Imaging: 2/21/2025 11:17:21 AM

Lab Sample ID 885-6908-1	Client Sample ID MW-9 Shallow	Prep Type Total/NA	Matrix Water	Method 3511	Prep Batch
885-6908-2	MW-9 Middle	Total/NA	Water	3511	
885-6908-3	MW-9 Deep	Total/NA	Water	3511	

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QC Association Summary

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

GC Semi VOA (Continued)

Prep Batch: 7523 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6908-4	MW-1	Total/NA	Water	3511	
885-6908-5	MW-5	Total/NA	Water	3511	
885-6908-6	MW-6	Total/NA	Water	3511	
885-6908-7	MW-4	Total/NA	Water	3511	
885-6908-8	MW-2	Total/NA	Water	3511	
885-6908-9	MW-3	Total/NA	Water	3511	
885-6908-10	MW-8 Shallow	Total/NA	Water	3511	
885-6908-11	MW-8 Middle	Total/NA	Water	3511	
885-6908-12	MW-8 Deep	Total/NA	Water	3511	
885-6908-13	MW-7 Shallow	Total/NA	Water	3511	
885-6908-14	MW-7 Deep	Total/NA	Water	3511	
885-6908-15	MW-7 Shallow Duplicate	Total/NA	Water	3511	
MB 885-7523/1-A	Method Blank	Total/NA	Water	3511	
LCS 885-7523/2-A	Lab Control Sample	Total/NA	Water	3511	
885-6908-15 MS	MW-7 Shallow Duplicate	Total/NA	Water	3511	
885-6908-15 MSD	MW-7 Shallow Duplicate	Total/NA	Water	3511	

Analysis Batch: 7694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6908-1	MW-9 Shallow	Total/NA	Water	8015D	7523
885-6908-2	MW-9 Middle	Total/NA	Water	8015D	7523
885-6908-3	MW-9 Deep	Total/NA	Water	8015D	7523
885-6908-4	MW-1	Total/NA	Water	8015D	7523
885-6908-5	MW-5	Total/NA	Water	8015D	7523
885-6908-6	MW-6	Total/NA	Water	8015D	7523
885-6908-7	MW-4	Total/NA	Water	8015D	7523
885-6908-8	MW-2	Total/NA	Water	8015D	7523
885-6908-9	MW-3	Total/NA	Water	8015D	7523
885-6908-10	MW-8 Shallow	Total/NA	Water	8015D	7523
885-6908-11	MW-8 Middle	Total/NA	Water	8015D	7523
885-6908-12	MW-8 Deep	Total/NA	Water	8015D	7523
885-6908-13	MW-7 Shallow	Total/NA	Water	8015D	7523
885-6908-14	MW-7 Deep	Total/NA	Water	8015D	7523
885-6908-15	MW-7 Shallow Duplicate	Total/NA	Water	8015D	7523
MB 885-7523/1-A	Method Blank	Total/NA	Water	8015D	7523
LCS 885-7523/2-A	Lab Control Sample	Total/NA	Water	8015D	7523
885-6908-15 MS	MW-7 Shallow Duplicate	Total/NA	Water	8015D	7523
885-6908-15 MSD	MW-7 Shallow Duplicate	Total/NA	Water	8015D	7523

HPLC/IC

Analysis Batch: 7768

Released to Imaging: 2/21/2025 11:17:21 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6908-1	MW-9 Shallow	Total/NA	Water	300.0	<u> </u>
885-6908-2	MW-9 Middle	Total/NA	Water	300.0	
885-6908-3	MW-9 Deep	Total/NA	Water	300.0	
885-6908-4	MW-1	Total/NA	Water	300.0	
885-6908-5	MW-5	Total/NA	Water	300.0	
885-6908-7	MW-4	Total/NA	Water	300.0	
885-6908-9	MW-3	Total/NA	Water	300.0	
885-6908-10	MW-8 Shallow	Total/NA	Water	300.0	

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QC Association Summary

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

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HPLC/IC (Continued)

Analysis Batch: 7768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6908-11	MW-8 Middle	Total/NA	Water	300.0	
885-6908-12	MW-8 Deep	Total/NA	Water	300.0	
885-6908-13	MW-7 Shallow	Total/NA	Water	300.0	
885-6908-14	MW-7 Deep	Total/NA	Water	300.0	
885-6908-15	MW-7 Shallow Duplicate	Total/NA	Water	300.0	
MB 885-7768/4	Method Blank	Total/NA	Water	300.0	
LCS 885-7768/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-7768/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 7923

Lab Sample ID 885-6908-6	Client Sample ID MW-6	Prep Type Total/NA	Matrix Water	Method 300.0	Prep Batch
MB 885-7923/4	Method Blank	Total/NA	Water	300.0	
LCS 885-7923/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-7923/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 8058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6908-8	MW-2	Total/NA	Water	300.0	<u> </u>
MB 885-8058/4	Method Blank	Total/NA	Water	300.0	
LCS 885-8058/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-8058/3	Lab Control Sample	Total/NA	Water	300.0	

Job ID: 885-6908-1

SDG: Energy WLSU #8

Lab Chronicle

Client: Daniel B. Stephens & Associates Inc.

Client Sample ID: MW-9 Shallow

Project/Site: Diamond Back Energy

Lab Sample ID: 885-6908-1

Matrix: Water

Date Collected: 06/20/24 10:40 Date Received: 06/25/24 10:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 08:06
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/03/24 20:23
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:29
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 14:19
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 12:19

Client Sample ID: MW-9 Middle Lab Sample ID: 885-6908-2

Date Collected: 06/20/24 12:00 **Matrix: Water** Date Received: 06/25/24 10:00

Dilution Batch **Batch** Batch Prepared Method or Analyzed **Prep Type** Туре Run Factor Number Analyst Lab 07/04/24 09:19 Total/NA Analysis 8015D 7932 CM **EET ALB** Total/NA Analysis 8260B 1 7872 JR **EET ALB** 07/03/24 20:52 Total/NA Prep 3511 7523 DH **EET ALB** 06/27/24 15:29 Total/NA Analysis 8015D 7694 DH **EET ALB** 07/01/24 14:31 1 Total/NA Analysis 300.0 20 7768 JT **EET ALB** 06/29/24 12:44

Client Sample ID: MW-9 Deep Lab Sample ID: 885-6908-3

Matrix: Water Date Collected: 06/20/24 13:00 Date Received: 06/25/24 10:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D			7932	CM	EET ALB	07/04/24 09:44
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/03/24 21:21
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:29
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 14:44
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 13:33

Client Sample ID: MW-1 Lab Sample ID: 885-6908-4

Date Collected: 06/20/24 14:00 **Matrix: Water** Date Received: 06/25/24 10:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 10:08
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/03/24 21:49
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:29
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 14:56
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 14:23

Project/Site: Diamond Back Energy

Client Sample ID: MW-5

Date Collected: 06/20/24 14:42

Date Received: 06/25/24 10:00

Client: Daniel B. Stephens & Associates Inc.

Analysis

300.0

20

7768 JT

EET ALB

Job ID: 885-6908-1 SDG: Energy WLSU #8

Matrix: Water

Lab Sample ID: 885-6908-5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 10:32
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 03:04
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:29
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 15:09

Lab Sample ID: 885-6908-6

06/29/24 14:47

Matrix: Water

Date Collected: 06/20/24 15:35 Date Received: 06/25/24 10:00

Client Sample ID: MW-6

Total/NA

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 10:57
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 03:32
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:29
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 15:21
Total/NA	Analysis	300.0		100	7923	JT	EET ALB	07/03/24 13:17

Client Sample ID: MW-4 Lab Sample ID: 885-6908-7 Date Collected: 06/23/24 09:45

Matrix: Water

Date Received: 06/25/24 10:00

Batch Dilution Batch Prepared Batch **Prep Type** Type Method Run **Factor Number Analyst** Lab or Analyzed Total/NA 7932 CM 07/04/24 11:22 Analysis 8015D EET ALB Total/NA 07/04/24 04:01 Analysis 8260B 1 7872 JR **EET ALB** Total/NA Prep 3511 7523 DH FFT ALB 06/27/24 15:29 Total/NA 8015D Analysis 1 7694 DH **EET ALB** 07/01/24 15:34 Total/NA Analysis 300.0 20 7768 JT FFT ALB 06/29/24 16:26

Client Sample ID: MW-2 Lab Sample ID: 885-6908-8

Date Collected: 06/23/24 10:40 **Matrix: Water**

Date Received: 06/25/24 10:00

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D			7932	СМ	EETALB	07/04/24 11:46
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 04:29
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:29
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 16:01
Total/NA	Analysis	300.0		100	8058	RC	EET ALB	07/08/24 09:55

Total/NA

Analysis

Date Received: 06/25/24 10:00

Released to Imaging: 2/21/2025 11:17:21 AM

300.0

Lab Sample ID: 885-6908-9

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	CM	EET ALB	07/04/24 12:11
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 04:58
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:32
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 16:14
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 17:16

Client Sample ID: MW-8 Shallow Lab Sample ID: 885-6908-10

Date Collected: 06/23/24 12:40 **Matrix: Water** Date Received: 06/25/24 10:00

Dilution Batch Batch Batch Prepared Method **Prep Type** Туре Run Factor **Number Analyst** Lab or Analyzed 07/04/24 12:35 Total/NA Analysis 8015D 7932 CM **EET ALB** Total/NA Analysis 8260B 1 7872 JR **EET ALB** 07/04/24 05:27 Total/NA Prep 3511 7523 DH **EET ALB** 06/27/24 15:32 Total/NA Analysis 8015D 7694 DH **EET ALB** 07/01/24 16:27 1 Total/NA Analysis 300.0 20 7768 JT **EET ALB** 06/29/24 17:40

Client Sample ID: MW-8 Middle Lab Sample ID: 885-6908-11

Date Collected: 06/23/24 13:45 **Matrix: Water** Date Received: 06/25/24 10:00

Batch Dilution Batch Batch **Prepared Prep Type** Type Method Run **Factor Number Analyst** Lab or Analyzed Total/NA 07/04/24 13:00 Analysis 8015D 7932 CM EET ALB Total/NA Analysis 8260B 1 7872 JR **EET ALB** 07/04/24 05:55 Total/NA 3511 7523 DH FFT ALB 06/27/24 15:32 Prep Total/NA 8015D Analysis 1 7694 DH **EET ALB** 07/01/24 16:40

Client Sample ID: MW-8 Deep Lab Sample ID: 885-6908-12

7768 JT

FFT ALB

06/29/24 18:30

20

Date Collected: 06/23/24 15:05 **Matrix: Water**

	Batch	Batch		Dilution	Batch			Prepared	
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed	
Total/NA	Analysis	8015D		1	7932	СМ	EETALB	07/04/24 13:24	
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 06:24	
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:32	
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 16:54	
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 18:54	

Project/Site: Diamond Back Energy

Client Sample ID: MW-7 Shallow

Date Collected: 06/23/24 16:15 Date Received: 06/25/24 10:00

Lab Sample ID: 885-6908-13

Matrix: Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 13:49
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 06:52
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:32
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 17:07
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 19:19

Lab Sample ID: 885-6908-14

Date Collected: 06/23/24 17:40 **Matrix: Water**

Date Received: 06/25/24 10:00

Client Sample ID: MW-7 Deep

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 14:14
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 07:21
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:32
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 17:20
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 19:44

Client Sample ID: MW-7 Shallow Duplicate Lab Sample ID: 885-6908-15

Date Collected: 06/23/24 16:15 **Matrix: Water**

Date Received: 06/25/24 10:00

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 14:38
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 07:49
Total/NA	Prep	3511			7523	DH	EET ALB	06/27/24 15:32
Total/NA	Analysis	8015D		1	7694	DH	EET ALB	07/01/24 17:33
Total/NA	Analysis	300.0		20	7768	JT	EET ALB	06/29/24 20:09

Client Sample ID: Field Blank Lab Sample ID: 885-6908-18

Date Collected: 06/23/24 18:15 **Matrix: Water**

Date Received: 06/25/24 10:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015D		1	7932	СМ	EET ALB	07/04/24 15:03
Total/NA	Analysis	8260B		1	7872	JR	EET ALB	07/04/24 08:18

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Daniel B. Stephens & Associates Inc.

Project/Site: Diamond Back Energy

Job ID: 885-6908-1 SDG: Energy WLSU #8

Laboratory: Eurofins Albuquerque

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

thority	Progr	am	Identification Number	Expiration Date
w Mexico	State		NM9425, NM0901	02-26-25
,	s are included in this repo does not offer certification		not certified by the governing author	ity. This list may include analyt
Analysis Method	Prep Method	 Matrix	Analyte	
300.0	 -	Water	Chloride	
8015D		Water	Gasoline Range Organic	s [C6 - C10]
8015D	3511	Water	Diesel Range Organics [C10-C28]
8015D	3511	Water	Motor Oil Range Organic	s [C28-C40]
8260B		Water	Benzene	
8260B		Water	Ethylbenzene	
8260B		Water	Toluene	
8260B		Water	Xylenes, Total	
egon	NELA	Р	NM100001	02-26-25
,	s are included in this repo does not offer certification	•	not certified by the governing author	ity. This list may include analyt
Analysis Method	Prep Method	Matrix	Analyte	
8015D		Water	Gasoline Range Organic	s [C6 - C10]

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06/23/24/0:40 HZO MW-2	4								
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Login Sample Receipt Checklist

Client: Daniel B. Stephens & Associates Inc.

Job Number: 885-6908-1

SDG Number: Energy WLSU #8

List Source: Eurofins Albuquerque Login Number: 6908

List Number: 1

Creator: McQuiston, Steven

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

Appendix F Historical Data



Historical Water Quality Data

					Chlo	oride Conc	entration (p	pm)				
Well ID	2002 Q4	2009 Q1	2009 Q4	2009 Q3	2010 Q2	2010 Q1	2012 Q4	2015 Q4	2016 Q4	2016 Q3	2016 Q2	2016 Q1
MW-1	-	-	-	-	-	-	27	27.6	27.7	29.8	19.5	24.5
MW-2	-	-	-	-	-	-	130	821	869	1450	674	493
MW-3	-	-	-	-	-	-	28	28.5	28	29.7	21.4	24.6
MW-4	-	-	-	-	-	-	390	193	227	255	123	136
MW-5	-	-	-	-	-	-	23	25.1	28.2	26.9	20.2	24
MW-6	-	-	-	-	-	-	-	544	1420	1410	1570	1360
MW-7D	-	-	-	-	-	-	-	-	-	-	-	-
MW-7S	-	-	-	-	-	-	-	-	-	-	-	-
MW-8D	-	-	-	-	-	-	-	-	-	-	-	-
MW-8M	-	-	-	-	-	-	-	-	-	-	-	-
MW-8S	-	-	-	-	-	-	-	-	-	-	-	-
MW-9D	-	-	-	-	-	-	-	-	-	-	-	-
MW-9M	-	-	-	-	-	-	-	-	-	-	-	-
MW-9S	-	-	-	-	-	-	-	-	-	-	-	-
Pond Water Well	-	-	-	-	-	-	-	-	-	-	-	-
WLSU #11 windmill	-	31	-	-	-	-	-	-	-	-	-	-
WLSU #20 water well	-	26	-	-	-	-	-	-	-	-	-	-
WSLU #8 water well	99	298	2485	4331	440	1101	-	-	-	-	-	-
WSLU #8 Windmill	-	-	-	-	-	-	-	-	-	-	-	-
Battery A water Well	-	28	-	-	-	-	-	-	-	-	-	-
House Water Well	-	-	-	-	-	-	-	-	-	-	-	-

Historical Water Quality Data

		Chloride Concentration (ppm)												
Well ID	2017 Q4	2017 Q3	2017 Q2	2017 Q1	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2022 Q1	2023 Q2	2024 Q2			
MW-1	30.5	28.8	26.4	26.7	26.4	29.1	28.2	29.6	26	28	28			
MW-2	836	526	2500	980	1240	1500	1260	1320	1200	1400	1300			
MW-3	29.7	27.1	26.9	27.4	26.5	27	27.3	-	25	26	27			
MW-4	217	187	153	154	187	181	180	-	230	300	140			
MW-5	29.1	40.8	25.6	26.2	25.9	25.7	26.6	-	25	26	28			
MW-6	1220	1070	2570	1370	983	1120	1200	1250	1000	1000	980			
MW-7D	-	-	-	-	-	-	-	-	34	52	73			
MW-7S	-	-	-	-	-	-	-	-	38	56	69			
MW-8D	-	-	-	-	_	-	-	-	40	30	29			
MW-8M	-	-	-	-	_	-	-	-	46	24	24			
MW-8S	-	-	-	-	_	-	-	-	20	24	23			
MW-9D	-	-	-	-	_	-	-	-	29	34	35			
MW-9M	-	-	-	-	_	-	-	-	46	33	33			
MW-9S	-	-	-	-	-	-	-	-	27	27	29			
Pond Water Well	-	-	-	-	-	-	-	-	32	30	-			
WLSU #11 windmill	-	-	-	-	-	-	-	-	-	23	-			
WLSU #20 water well	-	-	-	-	-	-	-	-	-	-	-			
WSLU #8 water well	-	-	-	-	_	-	-	-	_	-	-			
WSLU #8 Windmill	-	-	-	-	-	-	-	-	24	-	-			
Battery A water Well	-	-	-	-	-	-	-	-	-	-	-			
House Water Well	-	-	-	-	_	-	-	-	32	38	-			

Historical Water Level Elevation Data

					Wate	r Level Ele	vation (fee	t msl)				
Well ID	2012 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2021 Q3	2022 1Q	2024 2Q
MW-1	3,922.16	3,919.17	3,919.15	3,919.16	3,919.05	3,919.10	3,919.04	3,919.05	3,919.16	-	3,918.44	3,918.07
MW-2	3,917.72	3,917.22	3,917.22	3,917.22	3,917.42	3,917.17	3,917.39	3,917.42	3,917.39	-	3,916.57	3,916.15
MW-3	3,920.93	3,917.54	3,917.54	3,917.53	3,917.43	3,917.48	3,917.38	3,917.43	3,917.53	-	3,916.91	3,916.52
MW-4	3,919.79	3,917.13	3,917.13	3,917.13	3,917.00	3,917.08	3,916.99	3,917.00	3,916.99	-	3,916.57	3,916.19
MW-5	3,919.29	3,918.83	3,918.83	3,918.83	3,918.83	3,918.77	3,918.70	3,918.83	3,918.70	-	3,918.30	3,917.93
MW-6	-	3,917.56	3,917.52	3,917.54	3,917.45	3,917.52	3,917.40	3,917.45	3,917.54	-	3,916.99	3,917.07
MW-7S	-	-	-	-	-	-	-	-	-	3,914.60	3,914.70	3,914.33
MW-7M	-	-	-	-	-	-	-	-	-	3,914.73	3,914.73	-
MW-7D	-	-	-	-	-	-	-	-	-	3,914.61	3,914.81	3,915.41
MW-8S	-	-	-	-	-	-	-	-	-	3,915.27	3,915.26	3,914.92
MW-8M	-	-	-	-	-	-	-	-	-	3,915.10	3,915.30	3,914.95
MW-8D	-	-	-	-	-	-	-	-	-	3,915.09	3,915.29	3,914.89
MW-9S	-	-	-	-	-	-	-	-	-	3,919.12	3,919.08	3,918.72
MW-9M	-	-	-	-	-	-	-	-	-	3,919.15	3,919.08	3,918.70
MW-9D	-	-	-	-	-	-	-	-	-	3,919.69	3,918.97	3,918.72

Site Characterization Report WLSU #8 OCD Case No. 1RP-2457 Lea County, New Mexico

Prepared for Energen Resources Corporation Midland, Texas

Prepared by



6020 Academy NE, Suite 100 Albuquerque, New Mexico 87109 www.dbstephens.com DB22.1348

May 30, 2023





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Site Characterization Report Energen WLSU #8

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- D November 2021 and March 2022 Laboratory Reports
- E Historical Data

Site Characterization Report Energen WLSU #8



1. Introduction

Daniel B. Stephens & Associates, Inc. (DBS&A) prepared this site characterization report on behalf of Energen Resources Corporation (Energen) regarding New Mexico Energy, Minerals and Natural Resources Department (NMEMNRD) Oil Conservation Division (OCD) case number 1RP-2457—a chloride release at West Lovington Strawn Unit (WLSU) #8 in Lea County, New Mexico (the site). Energen, the former unit operator, identified the release in 2009.

This report details investigative actions undertaken by Energen since the incident's discovery, and provides a characterization of the site. The investigative actions demonstrate that the extent of chloride impacts to groundwater is limited to the area immediately east of WLSU #8. Water quality data show that chloride concentrations at the site's monitor wells are stable.

Section 2 provides a physical description of the site, and summarizes its operational and investigative histories. Section 3 describes the installation of three monitor well nests in 2021, which were added to the site's existing monitor well network to further define the lateral and vertical extents of impacts to groundwater. Section 4 describes groundwater monitoring activities conducted at the site subsequent to the installation of the additional monitor well nests. Section 5 discusses groundwater conditions at and downgradient of the site based on both historical and recent monitoring data. It also presents the results of contaminant transport modeling. Concluding remarks are provided in Section 6.

2. Background

The following subsections describe the physical layout of the site and summarize its operational and groundwater investigative histories.

2.1 Physical Description

The site is located in Section 34, Township 15 South, Range 35 East in OCD unit letter 'L,' approximately 2.5 miles northwest of the city of Lovington, New Mexico. The site is situated on an approximately 2.4-acre footprint. The WLSU #8-R injection well is located near the center of the site (Figure 1). A battery of seven aboveground storage tanks (ASTs) is situated on the eastern edge of the site. A network of aboveground pipe spans the site's perimeter, including permanent pipelines and flexible temporary tubing.

May 30, 2023

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The WLSU #8 water well was located north of the tank battery near the northeast corner of the site (Figure 1). It was plugged and abandoned in 2015.

The site is constructed on Ogallala Formation, which is locally about 190 feet thick and predominantly composed of well-sorted, poorly to well-consolidated fine sand. A surficial layer of caliche is present throughout the site. It is 1.8 feet to more than 7.5 feet thick. The Ogallala Formation comprises the primary regional aquifer system in the area. It can be locally characterized as an unconfined aquifer with approximately 130 feet of saturated thickness based on site data. The water table is approximately 60 feet below ground surface (bgs). The Ogallala Formation locally overlies the Triassic Dockum Group, which behaves as an effective confining layer.

2.2 Operational History

The WLSU #8 well (formerly known as the Snyder F Com well) was initially drilled as a production well in 1994 (NMOCD, 1994). It was drilled to a depth of 11,872 feet bgs and into the Strawn Formation. The well is triple cased and cemented to the surface, including 391 feet of 13.375-inch surface casing set in Class 3 cement.

In 2001, Energen became the unit operator of the West Lovington Strawn Unit and continued production of the WLSU #8 well. In 2006, the WLSU #8 well was sidetracked and recompleted from approximately 4,800 to 11,887 feet bgs due to downhole problems (NMOCD, 2006a). A pit was constructed at the northeast corner of the site immediately north of the former WLSU #8 water well location to support drilling operations. OCD approved the pit's closure on October 10, 2006 (NMOCD, 2006b). Energen ceased production at the site in 2008 and converted the WLSU #8 production well into an injection well for enhanced oil recovery. Injection operations commenced in January 2010, at which point the well was redesignated as WLSU #8-R.

The WLSU #8 water well is believed to have been drilled in 1995 by an unknown driller (Terracon, 2016). Although a drilling application for the water well was submitted and approved by the Office of the State Engineer (OSE), the well was never registered (GST, 2013). The water well was plugged and abandoned in 2015.

2.3 Release Discovery and Response

In March 2009, Energen collected water quality samples from existing water wells in the WLSU #8 vicinity, as required by OCD before they could commence injection at WLSU #8-R.



Site Characterization Report Energen WLSU #8

These wells included the Battery "A" water well, the WLSU #11 windmill, the WLSU #20 water well, and the WLSU #8 water well. Concentrations of all analytes sampled for were below the New Mexico Water Quality Control Commission (NMWQCC) standards numerated in Section 3103 of 20.6.2 NMAC (Section 3103 standards), with the exception of chloride concentration at the WLSU #8 water well. The chloride concentration at this well was 298 milligrams per liter (mg/L), just above the standard of 250 mg/L.

Energen submitted a release notification and corrective action form (C-141) to OCD on October 26, 2009 that outlined the discovery of the elevated chloride concentration at the WLSU #8 water well and requested permission to investigate the release (Appendix A). On December 22, 2009, Energen performed a pumping test at the WLSU #8 water well with permission from OCD (per Case No. 14356, Order No. R10448-E) and the Roswell District Office of the OSE. During the initial 10 days of pumping, 15,464 barrels of water was extracted, and the chloride concentration decreased from 3,692 to 1,420 mg/L, as documented in a January 11, 2010 e-mail from Andy Cobb to Larry Johnson (NMEMNRD) (Energen, 2010).

In 2012, Energen had five monitor wells installed at the site (MW-1 through MW-5) (Figure 1). Well logs are provided in Appendix B. Soil samples were collected from the boreholes for the monitor wells, and water quality samples were collected from the monitor wells after their construction (GST, 2013). The samples were submitted to Hall Environmental Analysis Laboratory, Inc. (HEAL) in Albuquerque, New Mexico. The soil and water quality samples were analyzed for chloride and hydrocarbon concentrations (volatile organic compounds [VOCs] and polycyclic aromatic hydrocarbons [PAHs]). The water quality samples were also analyzed for major ion and metal concentrations. The maximum soil chloride concentration was 63 milligrams per kilogram (mg/kg), recorded at MW-4 at 0 to 2 feet bgs. This concentration is well below the closure criteria of 10,000 mg/kg for soils where depth to groundwater is 51 to 100 feet bgs, as specified in 19.15.29.12 NMAC. With the exception of MW-2 and MW-4, water quality samples collected from the monitor wells were at background levels (less than 50 mg/L), and meet the Section 3103 standard for chloride. Chloride concentrations at MW-2 and MW-4 were 130 and 390 mg/L, respectively (Figure 2). Chloride was the only analyte detected at a concentration above a Section 3103 standard. GeoScience Technologies (GST, 2013) submitted a monitor well completion and initial site characterization report to OCD on May 29, 2013 documenting the monitor well installations.

On September 24, 2015, the WLSU #8 water well was plugged and abandoned, and MW-6 was installed approximately 10 feet east of the water well's former location. These activities were





conducted in accordance with a proposal submitted to and approved by OCD (Terracon, 2015). The well log for MW-6 is provided in Appendix B. Soil samples were collected during the drilling of the borehole for MW-6 and were submitted to XENCO Laboratories, Inc. in Midland, Texas for analysis. The maximum soil chloride concentration was 14.5 mg/kg, measured at a depth of 5 feet bgs. Terracon (2017) documented the activities and laboratory analytical results in a report submitted to OCD on March 29, 2017. The report also provided results of 2016 quarterly groundwater monitoring. A similar monitoring report documenting quarterly 2017 quarterly groundwater monitoring was submitted to OCD on March 27, 2018 (Terracon, 2018). Water quality at MW-2 and MW-6 continually exceeded the Section 3103 standard for chloride between 2015 and 2018, while the water quality results at MW-4 exceeded it only once (Figure 2).

In September 2021, Energen had nested monitor wells MW-7, MW-8, and MW-9 installed upgradient and downgradient (Figure 1) of the site to further define the lateral and vertical extents of chloride impacts to groundwater. CMB Environmental and Geological Services, Inc. (CMB) provided oversight of the drilling and construction activities. Installation of these wells is documented in Section 3.

3. September 2021 Nested Monitor Well Installations

In September 2021, three monitor well nests (MW-7, MW-8, and MW-9) were installed to supplement the existing WLSU #8 monitor well network and further characterize groundwater conditions. The monitor well nests were sited and constructed in accordance with a work plan that was submitted to OCD (Price, 2021).

Cascade Drilling of Peralta, New Mexico drilled boreholes for and constructed the monitor well nests. The boreholes were drilled using the sonic drilling method. At each drilling site, a single borehole was advanced to the bottom of the Ogallala Aquifer (approximately 190 feet bgs). The upper portions of the boreholes were advanced using a 10-inch-diameter drill bit, while the lower portions of the boreholes were advanced using an 8-inch-diameter drill bit. Three 2-inch-diameter monitor wells were constructed within each borehole to establish a nest.

The monitor wells are constructed of 2-inch-diameter, Schedule (SCH) 40 polyvinyl chloride (PVC) casings with 0.020-inch slotted screens and 2-foot sumps. Monitor well screens are set at





different discrete depths to allow for water quality sampling at the top, middle, and bottom of the aquifer. Individual monitor wells of each nest are distinguished by an 's' for shallow, 'm' for middle, and 'd' for deep in the well ID (e.g., MW-7s, MW-7m, MW-7d). The shallow wells are completed across the water table with 20-foot screens. The middle and deep wells have 15-foot screens. Filter pack consisting of 10/20 silica sand is placed within the annulus across each screen interval. The filter packs are isolated from one another by hydrated bentonite. The surface completions include concrete pads and locking steel risers.

Locations of the three monitor well nests are shown in Figure 1. Well logs are provided in Appendix B, and descriptions are summarized as follow:

- *MW-7 (downgradient):* The location of this monitor well nest is approximately 80 feet north and 575 feet east of the former WLSU #8 water well location. The borehole was advanced to a total depth 197.5 feet bgs. The Triassic Dockum Group was encountered at 188 feet bgs. The shallow well is screened from 50.0 to 70.0 feet bgs, the middle well is screened from 126.0 to 141.0 feet bgs, and the deep well is screened from 173.5 to 188.5 feet bgs.
- *MW-8 (downgradient):* The location of this monitor well nest is approximately 350 feet south and 575 feet east of the former WLSU #8 water well location. The borehole was advanced to a total depth of 197.5 feet bgs. The Triassic Dockum Group was encountered at 191 feet bgs. The shallow well is screened from 50.0 to 70.0 feet bgs, the middle well is screened from 129.5 to 144.5 feet bgs, and the deep well is screened from 176.5 to 191.5 feet bgs.
- *MW-9 (upgradient):* The location of this monitor well nest is approximately 225 feet north and 510 feet west of the former WLSU #8 water well location. The borehole was advanced to a total depth of 197.5 feet bgs. The Triassic Dockum Group was encountered at 190 feet bgs. The shallow well is screened from 50.0 to 70.0 feet bgs, the middle well is screened from 128.0 to 143.0 feet bgs, and the deep well is screened from 175.0 to 190.0 feet bgs.

Surveyed coordinates and top of casing elevations for the monitor well nests and other WLSU #8 monitor wells are reported in Table 1. John West Surveying Company surveyed all the monitor wells on November 16, 2022 (Appendix C). Well construction information and initial depth to water measurements for the monitor well nests are provided in Table 2.

Soil samples were collected from the boreholes for the nested monitor wells at regular intervals and submitted to HEAL. Chloride was not detected in any of the soil samples at a reporting limit of 60 mg/kg (Appendix D).



4. March 2022 Groundwater Monitoring

On March 15 and 16, 2022, CMB conducted groundwater monitoring at the WLSU #8 wells (including the three new nests) and nearby supply wells. Water quality samples were collected and submitted to HEAL. Water quality results for samples from MW-2 and MW-6 exceeded the Section 3103 standard for chloride, with chloride concentrations of 1,200 and 1,000 mg/L, respectively. Water quality results for samples from the other site monitor wells meet the Section 3103 standard for chloride, including the samples collected at downgradient monitor well nests MW-7 and MW-8. The chloride concentration of the water quality sample collected from MW-4 was 230 mg/L.

Water quality samples collected from the three nearby supply wells meet the Section 3103 standard for chloride, with chloride concentrations at background levels (less than 50 mg/L). The three nearby supply wells include (1) the WLSU #11 windmill, located approximately 0.6 mile northwest of the site, (2) a pond well, and (3) a house well located approximately 0.7 mile southeast of the site at Mr. Daniel Fields's residence. The WLSU #11 windmill had a chloride concentration of 24 mg/L, and both the pond and domestic wells had a chloride concentration of 32 mg/L.

Samples from the WLSU #8 monitor well network collected during the March 2022 monitoring event were split with Mr. Daniel Fields's consultant, who submitted them to Envirotech, Inc. (Envirotech) for analyses. The analytical results for the split samples are similar to those of the primary samples that CMB submitted to HEAL. For example, with the exception of the chloride results for the sample collected from MW-9D, the differences in the chloride results between the two laboratories are less than 15 percent (Table 3). The chloride results for the sample collected from MW-9D differ by 42 percent (i.e., 29 mg/L vs. 44.4 mg/L); these two chloride concentrations are at background levels.

Appendix D provides the HEAL and Envirotech analytical laboratory reports for the primary and split samples.

5. Groundwater Characteristics

DBS&A compiled available groundwater level and water quality data for the site. These data are presented as hydrographs and in time-series plots of chloride concentrations (Figure 2). The compiled data are also provided in Appendix E. These data were used to support the





evaluations presented in Section 5.1 and 5.2. Section 5.3 describes advection-dispersion modeling that was conducted to provide additional characterization of groundwater flow and chloride transport at the site.

5.1 Groundwater Flow Direction and Velocity

Figure 3 is a potentiometric surface map constructed from March 2022 water level measurements. The water level data presented in the potentiometric surface map show that the groundwater gradient is toward the east-southeast at 0.0035 foot per foot (ft/ft). This groundwater flow direction and gradient are consistent with those of previous monitoring events that were conducted in 2016 and 2017 (Terracon, 2017 and 2018).

DBS&A evaluated variability of the groundwater flow direction and gradient by preparing a rose diagram based on historical water level data at the WLSU #8 site monitor wells (Figure 4). The rose diagram shows the historical groundwater flow direction and magnitude of hydraulic gradient for the period 2012 to 2022. The direction and gradient were calculated for combinations of three monitor wells, as follows: (1) MW-1, MW-2, and MW-5, (2) MW-2, MW-4, and MW-5, (3) MW-2, MW-4, and MW-6, and (4) MW-3, MW-4, and MW-5. Except for two calculations based on 2012 water level measurements that appear anomalous, the direction of groundwater flow is consistently to the east-southeast at a gradient of approximately 0.002 to 0.004 ft/ft.

The average linear groundwater flow velocity was calculated using Darcy's Law, as follows:

$$v = \frac{K}{n_e} \frac{(h_1 - h_2)}{l} \tag{1}$$

where v = average linear velocity (feet per day [ft/d])

K = hydraulic conductivity (ft/d)

n_e = effective porosity (dimensionless)

 h_2 = hydraulic head (elevation) downgradient (feet)

 h_1 = hydraulic head (elevation) upgradient (feet)

 $I = distance between h_1 and h_2 (feet)$

The hydraulic gradient is 0.0035 ft/ft based on the March 2022 potentiometric surface map (Figure 3). The hydraulic conductivity (K) of 22 feet per day (ft/d) and effective porosity (n_e) of 0.25 are taken from the OSE's groundwater model for Lea County (Musharrafieh and Chudnoff, 1999). Based on these parameter values, the calculated groundwater flow velocity is 0.3 ft/d





(110 feet per year [ft/yr]). The hydraulic conductivity of the Ogallala Aquifer is variable, and the average linear groundwater flow velocity could be lower, or as high as several feet per day.

5.2 Groundwater Chloride Distribution

Chloride concentrations in regional groundwater have historically been elevated in the area of the former location of the WLSU #8 water well (i.e., at MW-2 and MW-6). The chloride concentration at MW-4 has also occasionally exceeded the Section 3103 standard for chloride, with concentrations ranging from 123 to 390 mg/L (Figure 2). Figure 5 shows the current vertical and horizontal distributions of chloride at the site. Wells MW-2 and MW-6 are the only wells with chloride concentrations above the Section 3103 standard of 250 mg/L. These two wells are located immediately downgradient of the former location of the WLSU #8 water well. Wells MW-2 and MW-6 are approximately 120 feet southeast and 10 feet east, respectively, of the former location of the WLSU #8 water well. The chloride concentration at MW-4 is typically around the Section 3103 standard, and was 230 mg/L in March 2022. Well MW-4 is approximately 225 feet south-southeast of the former location of the WLSU #8 water well. The chloride concentrations at the WLSU #8 site monitor wells appear stable (Figure 2).

The extent of chloride impacts to groundwater is limited to the area immediately east of the former location of the WLSU #8 water well (Figure 5). Monitor well nests MW-7 and MW-8 were installed downgradient of the former location of the WLSU #8 water well, MW-2, and MW-6. The water quality samples collected from these nests meet Section 3103 standards, with chloride concentrations ranging from 20 to 46 mg/L (Figure 5). This range is typical of background levels, and similar to chloride concentrations recorded at upgradient monitor wells (i.e., MW-1, MW-5, and MW-9). The absence of elevated chloride concentrations at MW-7 and MW-8 indicates that chloride impacts to regional groundwater are limited to the vicinity of the former location of the WLSU #8 water well.

The chloride concentrations of the March 2022 water quality samples collected at the nested monitor wells are similar (Figure 5). For instance, the chloride concentrations at MW-8 were 20 mg/L (shallow), 46 mg/L (middle), and 40 mg/L (deep). Similar trends were seen at MW-7 and MW-9 (Figure 5). These water quality data demonstrate that density stratification of chloride is not present.

Figure 6 shows the chloride concentrations at the three Fields water wells, in addition to those at the WLSU #8 site. The water wells are the WLSU #11 windmill (upgradient) and the pond and house wells (both downgradient). The chloride concentrations at the three water wells are at





background levels (less than 50 mg/L) and meet Section 3103 standards (Appendix D). The analytical results therefore do not exhibit adverse impacts at these wells.

The calculated average linear groundwater flow velocity is 0.3 ft/d (110 ft/yr) (Section 5.1). Based on this velocity, groundwater impacts from the former location of the WLSU #8 water well would have reached MW-7 by now. Chloride is a conservative ion, meaning that it typically does not interact with other dissolved ions or aquifer materials, and therefore travels at about the same rate as groundwater. Well MW-7 is 690 feet southeast (downgradient) of the former WLSU #8 water well location, where elevated chloride concentrations were first observed in 2009. Given the distance to MW-7 (690 feet) and flow velocity (110 ft/yr), chloride-impacted groundwater would have reached MW-7 in approximately 6 years (by 2016). The absence of increased chloride concentrations at MW-7 suggests that chloride-impacted groundwater is diluted to background chloride concentrations through mixing (i.e., diffusion and dispersion) before reaching MW-7. The travel-time calculation presented here does not include processes such as diffusion and dispersion that can cause concentrations of dissolved constituents to decrease with distance from a source area.

5.3 Advection-Dispersion Modeling

DBS&A simulated the transport of chloride-impacted groundwater in the WLSU #8 vicinity using ATRANS-EXCEL (ATRANS). ATRANS is a three-dimensional advection dispersion model that uses analytical transport solutions to determine the concentration of dissolved constituents across time and distance away from a source (S.S. Papadopulos, 2016). It can be used to consider advection, dispersion, sorption, and first-order transformation reaction processes, and assumes that groundwater flow is steady and uniform. DBS&A used ATRANS to evaluate the degree to which elevated chloride concentrations could become natural diluted as groundwater travels away from the former location of the WLSU #8 water well.

DBS&A parameterized the ATRANS model using the same hydraulic properties as the calculation of the average linear groundwater flow velocity (Section 5.2): (1) hydraulic conductivity of 22 ft/d, (2) effective porosity of 0.25, and (3) hydraulic gradient to the southeast at 0.0035 ft/ft. The model domain was set at 1,000 square-feet with 800 cells. Longitudinal, transverse, and vertical dispersity values were assigned values of 10⁻², 10⁻³, and 10⁻⁴ feet. The effective diffusion coefficient was set to zero. The chloride source was simulated as a two-dimensional rectangular patch placed near the former location of the WLSU #8 water well location (20 feet wide and 5 feet deep) with a constant chloride concentration of 2,500 mg/L. The model was run at 1-year timesteps until a steady-state condition was achieved.





ATRANS simulated results are presented in Figure 7. Steady-state conditions were achieved at the site within 10 years. The simulated results show that dispersion effectively dilutes chloride concentrations to less than 250 mg/L 230 feet downgradient of the source, and to background levels 840 feet downgradient of the source (Figure 7). The ATRANS simulated results generally agree with the box model presented in Price (2021), which showed that chloride would attenuate to background levels within 600 feet of the source.

Despite some uncertainty about the timing and extent of the chloride release at the WLSU #8 site, the ATRANS simulated results demonstrate that elevated chloride concentrations are attenuated by dispersion to background levels within several hundred feet of the site. This is consistent with the water quality data collected to date at the existing monitor wells.

6. Conclusions and Recommendation

In March 2009, Energen (the former WLSU #8 operator) sampled several water wells in the vicinity of the WLSU #8 site. Chloride was detected at the WLSU #8 water well at a concentration of 298 mg/L, above the Section 3103 standard of 250 mg/L. Energen submitted a C-141 form to OCD in October 2009 notifying them of the elevated chloride concentration at the WLSU #8 water well. Since the discovery of the elevated chloride concentration, Energen has installed a total of nine monitor wells at the site. Five monitor wells were installed in 2012 (MW-1 through MW-5), one monitor well was installed in 2016 (MW-6), and three monitor well nests were installed in 2021 (MW-7 through MW-9). The WLSU #8 water well was plugged and abandoned in 2015.

The monitor well nests were installed in 2021 to supplement the exiting WLSU #8 monitor well network and further characterize groundwater conditions upgradient and downgradient of the site. They are also used to monitor the vertical distribution of chloride. The new monitor well nests, along with the other monitor wells and three Fields water wells, were sampled in March 2022. Water quality at the wells show that chloride impacts to groundwater are limited to the area immediately east of the WLSU #8 site (Figure 6). Wells MW-2 and MW-6 were the only wells in March 2022 with water quality results that exceed the Section 3103 standard for chloride. Chloride concentrations at downgradient monitor wells MW-7 and MW-8 met the Section 3103 standard for chloride and were at background level (less than 50 mg/L). This includes each of the screened intervals of the two monitor wells nests (MW-7 and MW-8).





Chloride concentrations at the site's monitor wells appear stable (Figure 2). The absence of increased chloride concentrations at downgradient monitor wells MW-7 and MW-8 and general stability of chloride concentrations at the site monitor wells suggest that the chloride impacts to groundwater are being naturally attenuated (through diffusion and dispersion) to background levels several hundred feet downgradient of the site.

DBS&A recommends annual groundwater monitoring at the nine site wells to help confirm that the chloride plume is stable and not migrating further from the site.

References

- Energen Resources Corporation (Energen). 2010. E-mail from Andy Cobb to Larry Johnson, Energy, Minerals and Natural Resources Department, regarding Water well sampling. January 11, 2010.
- GeoScience Technologies (GST). 2013. Geological and hydrogeological evaluation of borings and monitor wells at and around Energen Energy Corporation, Well #8-R West Lovington Strawn Unit, API 30-025-32291, 1980' FSL & 600' FWL, Section 34, Township 15 South, Range 35 East, Lea County, New Mexico. Prepared for Energen Resources Corporation, Midland, Texas. May 29, 2013.
- Musharrafieh, G. and M. Chudnoff. 1999. *Numerical simulation of groundwater flow for water rights administration in the Lea County underground water basin New Mexico*. New Mexico Office of the State Engineer Technical Report 99-1. January 1999.
- New Mexico Oil Conservation Division (NMOCD). 1994. Well completion report and log for oil well installed by Charles B. Gillespie, Jr., Unit Letter L: 1980 feet from the south line and 660 feet from the west line, Section 34, Township 15-S, Range 35-E, Lea County. Well API No. 30-025-32291. March 25, 1994.
- NMOCD. 2006a. Sundry notices and reports on wells for oil well operated by Energen Resources Corporation, Unit Letter L: 1980 feet from the south line and 660 feet from the west line, Section 34, Township 15S, Range 35E, Lea County. Well API No. 30-025-32291. August 7, 2006.
- NMOCD. 2006b. Pit or below-grade tank registration or closure form for WLSU 8R, operated by Energen Resources Corp. Well API No. 30-025-32291. October 10, 2006.

May 30, 2023

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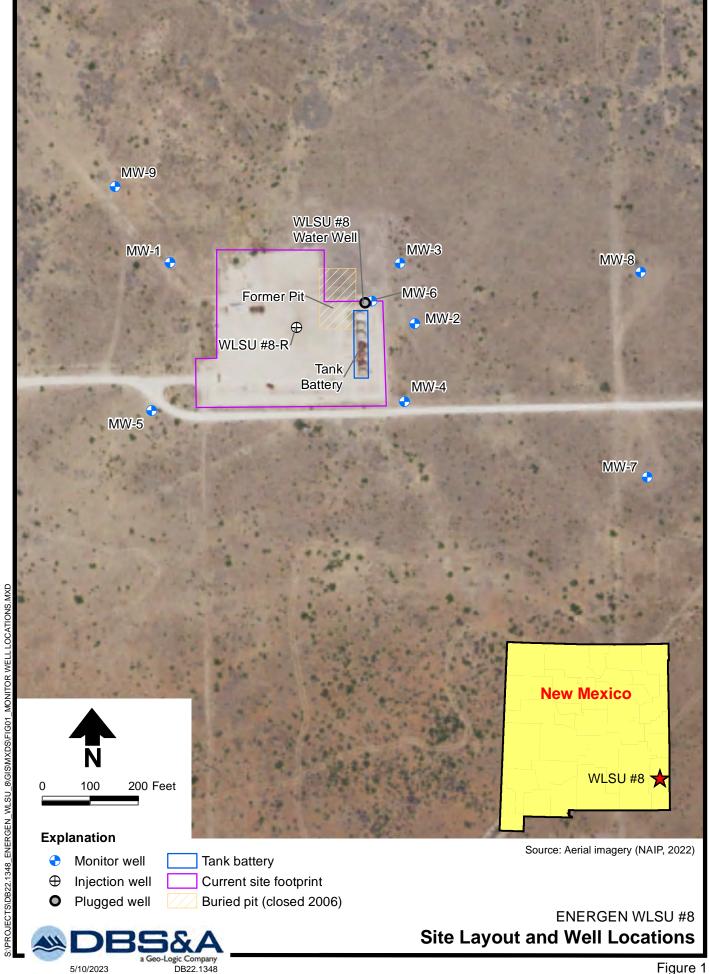


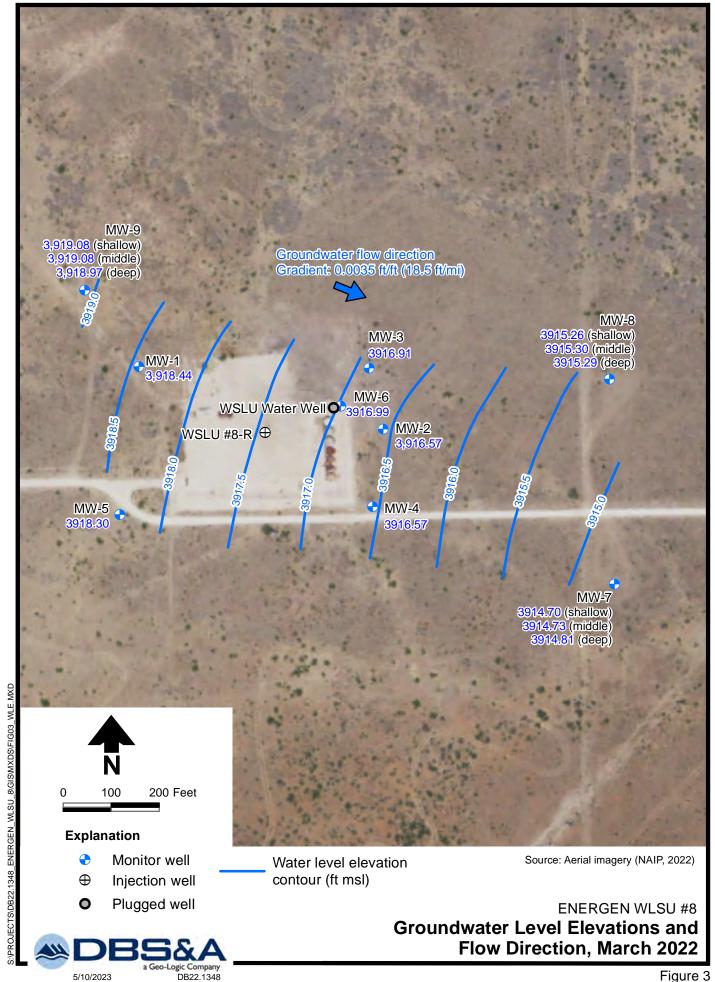


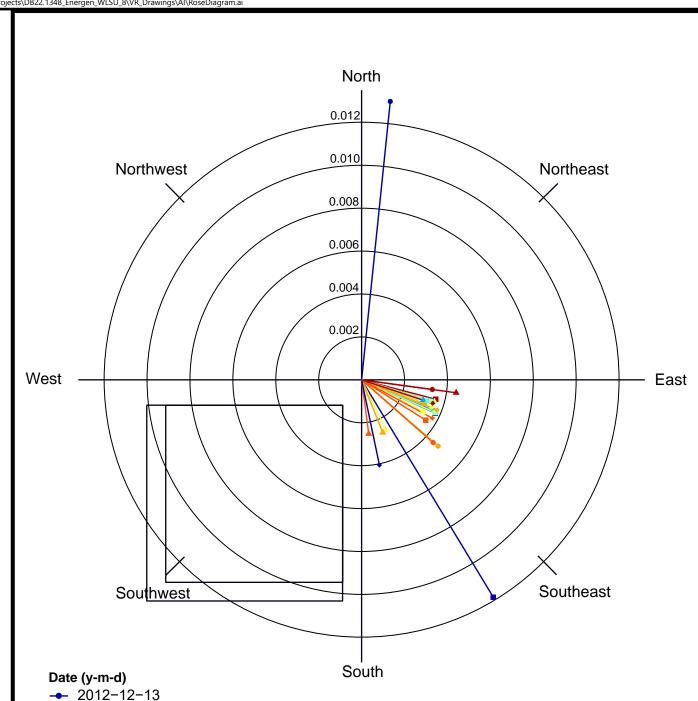
- Price LLC (Price). 2021. Letter report from Wayne Price to Brad Billings, New Mexico Oil Conservation Division, regarding Delineation of groundwater. January 5, 2021.
- S.S. Papadopulos & Associates, Inc. (S.S. Papadopulos). 2016. *ATRANS-EXCEL version 1.10*. July 4, 2016.
- Terracon Consultants, Inc. (Terracon). 2015. *Limited groundwater investigation proposal, West Lovington Strawn Unit #8, NMOCD Reference No. 1RP-2457, Unit Letter "L", Section 34, Township 15 South, Range 35 East, Lea County, New Mexico*. Prepared for Energen Resources Corp., Midland, Texas. Terracon Project No. AR157026. August 3, 2015.
- Terracon. 2016. Limited groundwater investigation summary and proposed activities, West Lovington Strawn Unit #8, NMOCD Reference No. 1RP-2457, Unit Letter "L", Section 34, Township 15 South, Range 35 East, Lea County, New Mexico. Prepared for Energen Resources Corp., Midland, Texas. Terracon Project No. AR157026. March 9, 2016.
- Terracon. 2017. 2016 Annual groundwater monitoring report, West Lovington Strawn Unit #8, Lea County, New Mexico. Prepared for Energen Resources Corporation, Midland, Texas. Terracon Project No. AR157026. March 29, 2017.
- Terracon. 2018. 2017 Annual groundwater monitoring report, West Lovington Strawn Unit #8, Lea County, New Mexico. Prepared for Energen Resources Corporation, Midland, Texas. Terracon Project No. AR157026. March 27, 2018.

Figures









- **2016-03-18**
- 2016-06-16
- 2016-08-23
- 2016-12-30
- 2017-03-09
- 2017-06-28
- 2017-09-14
- 2017-11-30
- 2022-03-15

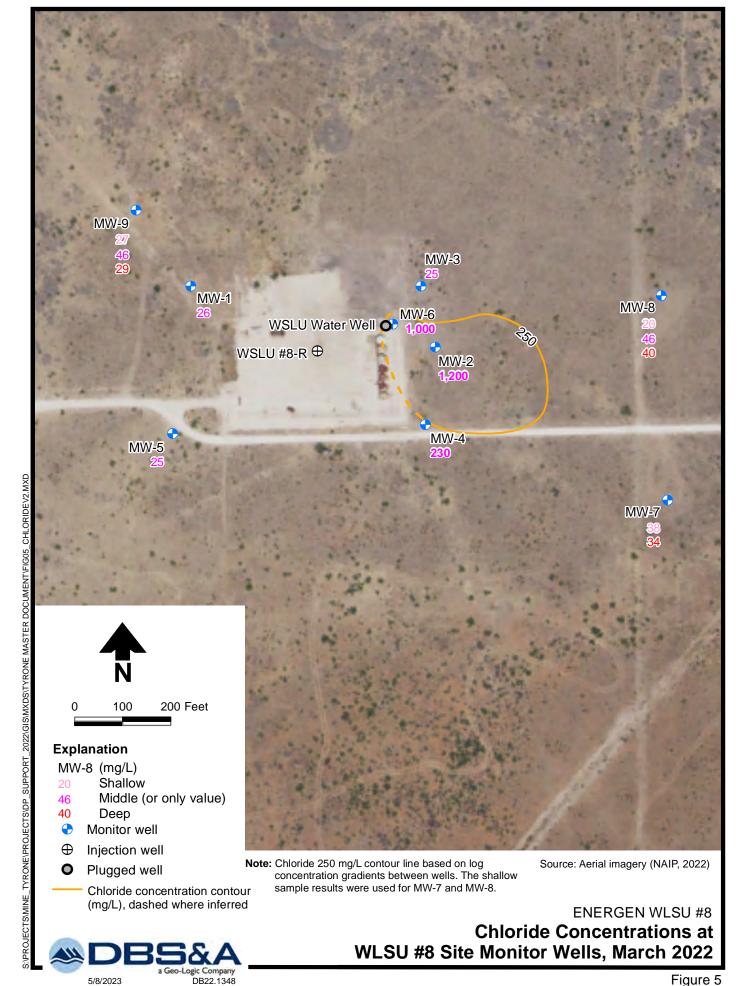
Monitor Well Combination

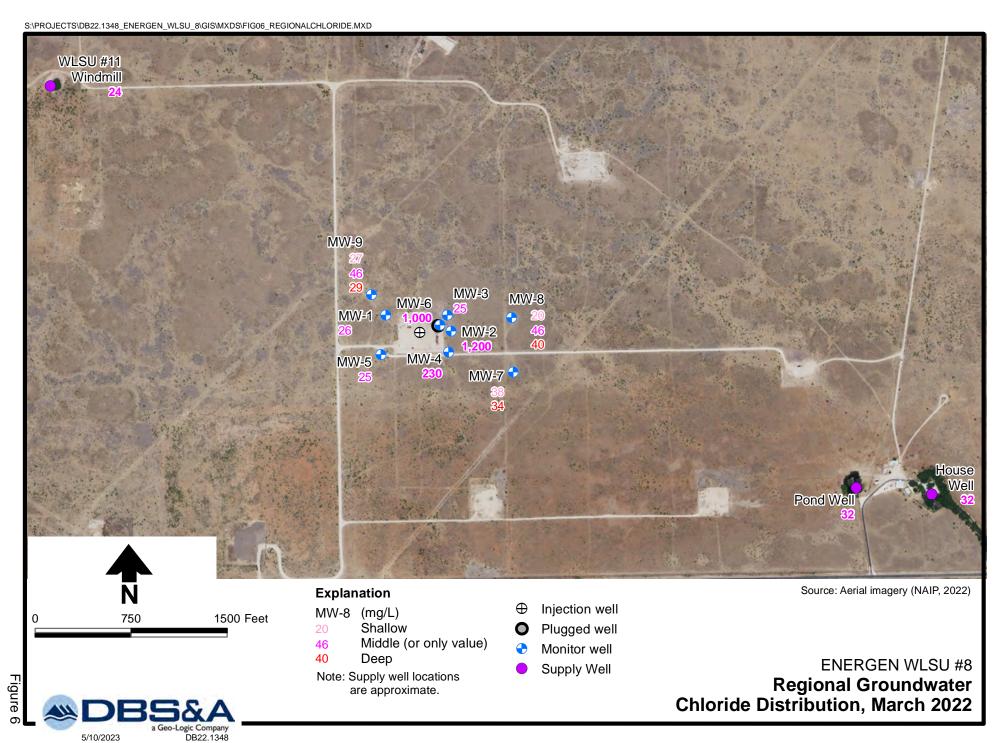
- MW-1, MW-2, MW-5
- MW-2, MW-4, MW-5
- MW-2, MW-4, MW-6
- MW-3, MW-4, MW-5

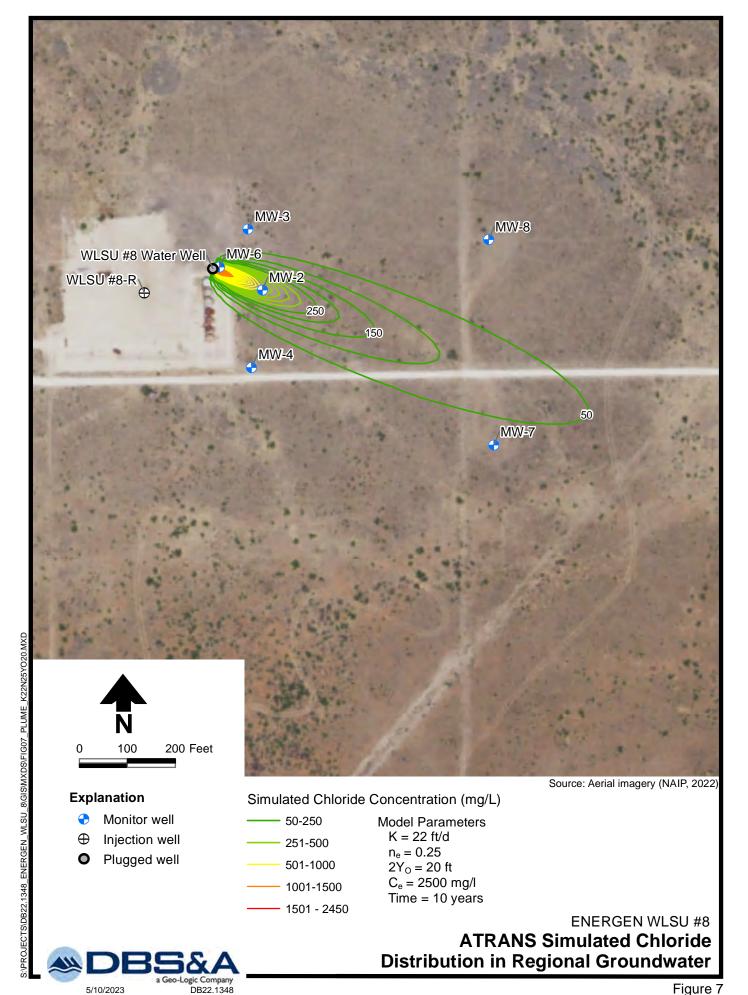
Note: Gradient and direction of groundwater flow calculated between various sets of three monitor wells throughout the period of record. The radial axis corresponds to the magnitude of the hydraulic gradient (ft/ft).

Rose Diagramor Historic Grandwater Flow Direction









Tables





Site Characterization Report Energen WLSU #8

Table 1. Monitor Well Survey Information, November 2021

			Coordina	tes ^a (feet)	Ground Surface	Top of Casing
Designation	OSE Permit No.	Completion Date	Northing	Easting	Elevation ^b (feet msl)	Elevation ^b (feet msl)
MW-1	L-13218-POD1	12/12/2012	718754.5	826775.5	3,973.05	3,975.52
MW-2	L-13218-POD2	12/12/2012	718624.4	827284.4	3,972.55	3,974.76
MW-3	L-13218-POD3	12/12/2012	718751.1	827254.9	3,973.86	3,976.67
MW-4	L-13218-POD5	12/13/2012	718462.6	827262.2	3,971.80	3,974.52
MW-5	L-13218-POD4	12/13/2012	718446.9	826735.6	3,971.78	3,974.43
MW-6	L-13218-POD6	9/14/2015	718672.3	827195.6	3,972.74	3,976.17
MW-7	L-15194-POD1	9/22/2021	718301.7	827766.4	3,969.65	3,969.41 (deep) 3,969.43 (middle) 3,969.45 (shallow)
MW-8	L-15194-POD2	9/18/2021	718728.7	827755.9	3,969.75	3,969.29 (deep) 3,969.30 (middle) 3,969.47 (shallow)
MW-9	L-15194-POD3	9/14/2021	718914.0	826662.6	3,972.15	3,971.82 (deep) 3,971.85 (middle) 3,971.80 (shallow)

^a NAD 1983 - New Mexico East Zone.

OSE = Office of the State Engineer

msl = Above mean sea level

^b NAD 1998 Vertical Datum



Table 2. Completion Information of Monitor Well Nests

		Screen Inter	val (feet bgs)	Total Borehole Depth	Total Well Depth	Depth to Water	Depth to Water Measurement
Designation	Casing Material and Diameter	Тор	Bottom	(feet bgs)	(feet bgs)	(feet btoc)	Date
MW-7S	2-inch SCH 40 PVC blank casing and	50.0	70.0	197.5	72.0	54.85	9/24/2021
MW-SM	2-inch SCH 40 PVC 0.020-inch slotted	126.0	141.0		143.0	54.70	9/24/2021
MW-7D	screen	173.5	188.5		190.5	54.80	9/24/2021
MW-8S		50.0	70.0	197.5	72.0	54.20	9/24/2021
MW-8M		129.5	144.5		146.5	54.20	9/24/2021
MW-8D		176.5	191.5		193.5	54.20	9/24/2021
MW-9S		50.0	70.0	197.5	72.0	52.68	9/24/2021
MW-9M		128.0	143.0		145.0	52.70	9/24/2021
MW-9D		175.0	190.0		192.0	52.13	9/24/2021

bgs = Below ground surface btoc = Below top of casing

SCH = Schedule

PVC = Polyvinyl chloride



Site Characterization Report Energen WLSU #8

Table 3. March 2022 Split Sample Chloride Concentration Comparison

Sample	Sample	Hall Environme Labora	,	Envirotech L	aboratory	Difference in Concentration	Chloride Percent
Location	Date	Chloride ^a (mg/L)	Analysis Date	Chloride ^b (mg/L)	Analysis Date	(mg/L)	Difference
MW-1	3/15/2022	26	3/21/2022	29.4	3/19/2022	-3.4	12.3 %
MW-2	3/16/2022	1,200	3/21/2022	1,350	3/19/2022	-150.0	11.8%
MW-3	3/15/2022	25	3/21/2022	27.9	3/19/2022	-2.9	11.0 %
MW-4	3/16/2022	230	3/21/2022	260	3/19/2022	-30.0	12.2%
MW-5	3/15/2022	25	3/21/2022	29	3/19/2022	-4.0	14.8 %
MW-6	3/15/2022	1,000	3/21/2022	1,140	3/19/2022	-140	13.1 %
MW-7D	3/16/2022	34	3/21/2022	38.5	3/19/2022	-4.5	12.4%
MW-7S	3/16/2022	38	3/21/2022	40.5	3/19/2022	-2.5	6.4%
MW-8D	3/16/2022	40	3/21/2022	44.6	3/19/2022	-4.6	10.9%
MW-8M	3/16/2022	46	3/21/2022	50.5	3/19/2022	-4.5	9.3%
MW-8S	3/16/2022	20	3/21/2022	22.8	3/19/2022	-2.8	13.1%
MW-9D	3/15/2022	29	3/21/2022	44.4	3/19/2022	-15.4	42.0 %
MW-9M	3/15/2022	46	3/21/2022	51.5	3/19/2022	-5.5	11.3 %
MW-9S	3/15/2022	27	3/21/2022	29.4	3/19/2022	-2.4	8.5 %

^a Analyzed using U.S. Environmental Protection Agency (EPA) method 300.0

mg/L = Milligrams per liter

^b Analyzed using EPA method 300.0/9056A

Appendix A

C-141 Forms



Form C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Revised October 10, 2003
Submit 2 Copies to appropriate
District Office in accordance

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

IRP#10.3.2457

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505 Release Notification and Corrective Action Initial Report **OPERATOR** Final Report Name of Company: Energen Resources Corporation Contact: Andrew Cobb Address: 3300 North A St. Bldg.4, Ste. 100 Midland, Tx. 79705 Telephone No.432-687-1155 Facility Type: Fresh Water Well @ WLSU #8 well 30.025.3229 Facility Name: West Lovington Strawn Unit Mineral Owner: N/A Surface Owner: Dan Field Lease No. N/A API LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County FNL 34 15S 35E 1980 660 FWI. Lea WIRSS! Latitude 32° 58'19.1" Longitude 103° 24' 06.5" NATURE OF RELEASE Type of Release: Unknown Volume of Release Volume Recovered Date and Hour of Occurrence Source of Release Date and Hour of Discovery Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ No ☐ Not Required By Whom? Date and Hour Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ☐ No If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* Sampling of fresh water well near the WLSU #8 well shows elevated chloride levels. Describe Area Affected and Cleanup Action Taken.* Will begin investigation into cause of the elevated levels and remediate to approved standard. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Signature: Approved by District Supervisor NMENTAL ENGINEER Printed Name: Andrew Cobb Expiration Date: 5.19.10 Title:Sr. Safety & Environmental Specialist Approval Date: 3.19.10 E-mail Address:andy.cobb@energen.com Conditions of Approval: Attached

10-26-09

Phone: 432-686-3599

Date: Jan 29, 2021

Ramona Marquez New Mexico Oil Conservation Division

RE: Energen Resources Corporation West Lovington Strawn Unit No. 8
UL "L" Section 34-Township 15 South, Range 35 East, Lea County New Mexico
OCD No. 1RP-2457
Delineation of Ground Water

Dear Ms. Marquez:

I write this letter at the request of Brad Billings of the New Mexico Oil Conservation Division to provide evidence of authorization of Wayne Price of Price, LLC to, consistent with the understanding set forth in this letter, represent and submit documents on behalf of Energen Resources Corporation ("Energen"). Energen is a wholly owned subsidiary of Diamondback Energy, Inc.

Mr. Price has been retained by Energen to consult and advise concerning claims of groundwater contamination associated with the West Lovington Strawn Unit No. 8. In that regard he has been authorized to submit documents on behalf of Energen to the New Mexico Oil Conservation Division, and in particular to submit those documents necessary to obtain approval for the installation of four additional ground water monitoring wells, as set forth in his letter of January 4, 2021 to Mr. Brad Billings and subsequent communication between he and Mr. Billings.

I trust that this gives you the information necessary to properly document the authorization of Mr. Price to act on behalf of Energen.

Very truly yours,

Andy Cobb

From: Wayne Price wayneprice@q.com

Subject: 1RP-2457 Amended

Date: January 19, 2021 at 8:25 AM

To: EMNRD Billings Bradford Bradford Billings@state.nm.us

Cc: Wayne Price wayneprice@q.com, Richard Olson rolson@hinklelawfirm.com, Clayton Barnhill cmbenviro@gmail.com

Dear Brad,

Please find attached the amended plan pursuit to our recent telephone conference call. I will also insert this E-mail and aerial view showing the additional MW-10 down-gradient well and the moved location of the up-gradient MW-9 well in your new electronic submittal system. Per your phone instructions we may begin the project.

Thank you for your assistance.

Wayne Price-Price LLC 7 SYCAMORE LANE GLENWOOD NM 88039 wayneprice@q.com 505-715-2809



January 05, 2021

Mr. Brad Billings-NMOCD-Albuquerque Office, 5200 Oakland Avenue, N.E. Suite 100, 87113

Via E-mail: EMNRD Billings Bradford <Bradford.Billings@state.nm.us

Reference:

Energen Resources Corporation West Lovington Strawn Unit#8 UL "L" Sec 34–TS15S Rg 35E

Lea County, NM OCD Case # 1RP-2457

Subject: Delineation of Groundwater

Dear Brad,

On behalf of the Energen Resources Corporation Project, Price LLC (Wayne Price) request OCD approval to install three (3) additional groundwater monitoring wells at the above reference location. The objective is to further define the vertical and horizontal extent of contamination at the site.

Our plan is to install an up-gradient well and two additional down-gradient wells. Please refer to the attached aerial plat for approximate locations. The attachment includes a simple dilution box model that assisted in determining the down-gradient distance for these wells. The estimated depth was taken from area wells logs and "Triassic" Red Bed maps for the area. (REF: USGS Hydrologic Investigation Atlas HA-62) complete report enclosed for reference.

The down-gradient well locations were place in order to assure future protection of known fresh water resources in the area.

Each well will be an EPA approved type nested well containing three isolated 2" well bores with isolation seals and proper sand/gravel pack, all completed in a 6" PVC casing. The top well will be equipped with 20 foot slotted screen, 5 feet above he current water level and 15 ft. below. The second well will be similar in construction and will have 15 feet of screen in the mid-range of the aquifer, and the third well will have 15 feet of screen for monitoring the bottom of the aquifer.

This will allow_samples to be collected at the top, middle and bottom of the aquifer to pick up floating hydrocarbons or density gradient constituents such as chlorides.

Before installation of additional monitor wells, we plan on collecting water samples from each existing monitor well for WQCC volatiles, semi -volatiles, metals, and

inorganic constituents to establish a new baseline and constituents of concern (COC's).

The first round of sampling of the three new wells will also include these COC's. Attached is the most recent water analysis that was collected in 2018 with up-dated site plat. The 2019 event is missing, and we will report the next results in the first quarter of 2021.

Once the new wells have been installed, levels measured, we will utilize EPA protocols, properly purge with Ph., Conductivity, and Temperature measurements to ensure we are obtaining a stabilized sample before collecting, preserve, and then analyzed at an approved Laboratory.

A report will be sent to you with findings, conclusions and recommendations.

If you have any questions, concerns or comments please contact me at wayneprice@q.com or 505-715-2809.

Sincerely,

2 Pro

Wayne Price-Price LLC 7 Sycamore Ln Glenwood, NM 88039

CC: Richard Olson-Hinkle Shanor LLP
Bill B. Caraway-Deputy General Counsel Diamondback Energy
Andy Cobb-Diamondback Energy Inc.
Clay Barnhill-CMB Environmental & Geological Services
Wayne Price-Jr BSME Environmental Engineer

Attachments:

- 1- Aerial view of proposed wells.
- 2-GW Model.
- 3- USGS- Geography, Geology and Groundwater and Histoy.
- 4- Annotated Site Map with most recent Chlorides.
- 5- Nov 2018 analytical result report



Dilution Box Model Energen Resources-W. Lov. Strawn Unit #8 UL I-Sec 34-Ts15S-R34E OCD 1RP-2457

Model Objective:

To determine a reasonable distance for installing down-gradient monitor wells to define the outer limit of the contamination

Model Description:

A simple volumetric dilution model that compares the estimated source volume at certain worst case concentration of Chlorides, to an estimated volume of down-gradient fresh water, and calculates the DAF (Diluton Attenuation Factor) for the site. By varing the down-gradient length (a manuel reiterative process), then the assumptions provides a calculated distance for the installation of down-gradient wells. Model assumtions for the initial source area was taken from the site diagram and initial depth estimated. The mixing zone lateral width of 100 feet was used as several EPA DAF models use this default dimension. The depth was determine from the estimated depth of the first confinin layer in the Ogalla aquifer in this area.

Model Limitations:

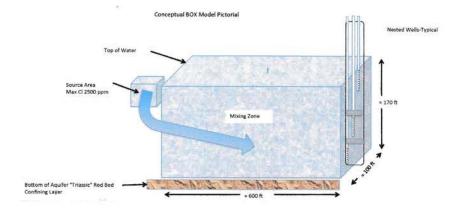
This model is for estimation of MW placement, and only provides an Initial starting point. Depending upon future sampling results

will actul determine future delineation work.

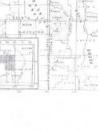
Model Results:

The model results indicate that the wells can be approximately 600 ft down-gradient and still maintain a Chloride level of the natural

VOL Ft3 125000 Depth ft 50 Gal/ft3 932,500 Diluted Volume Down-Gradient 100 170 10200000 76,092,000 81.6 DAF Source Diluted down Gradient 2500 PPM 31 PPM 2,500 ppm 2500/Daf= Estimated Chlorides within statistical range for background





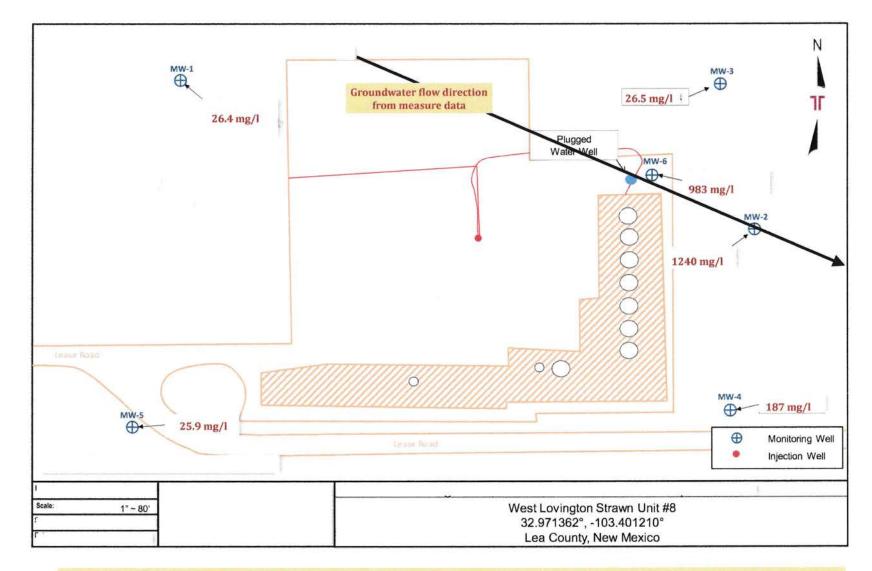






CONTRACTOR SAVAR CONTRACT AND DAY

Received by OCD: 10/15/2024 2:45:57 PM



Plat copied from OCD Well File Annotated by Price LLC to show the Nov 2018 chloride sample results: Analysis attached herein. Jan 05, 2021

Received by OCD: 10/15/2024 2:45:57 PM



Certificate of Analysis Summary 606107

Terracon Lubbock, Lubbock, TX
Project Name: West Lovington Strawn Unit #8

Project Id:

AR157026

Contact:

Brett Dennis

Project Location:

Date Received in Lab: Tue Nov-20-18 08:45 am

Report Date: 29-NOV-18

Project Manager: Kelsey Brooks

hloride	Units/RL:	mg/L 26.4	RL 12.5	mg/L 1240	RL 250	mg/L 26.5	RL 12.5	mg/L 187	RL 25.0	mg/L 25.9	RL 12.5	mg/L 983	RL 250	
Chloride by EPA 300	Extracted: Analyzed:	Nov-28-18 Nov-28-18	16:21	Nov-28-18 I	16:59	Nov-28-18 1	7:11	Nov-28-18 I	17:23	Nov-28-18 Nov-28-18	17:36	Nov-28-18 Nov-28-18	17:48	
construction Market Statement of Afficient of Statement Statement	Depth: Matrix: Sampled:	WATEI Nov-19-18		WATEI Nov-19-18		WATER Nov-19-18 I		WATER Nov-19-18 I	35	WATE		WATEI Nov-19-18		
Analysis Requested	Lab Id: Field Id:	606107-0 MW-1	5262	606107-0 MW-2	275	606107-0 MW-3	1000	606107-0 MW-4	(C. 17.)	606107-0 MW-5		606107-006 MW-6		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks Project Manager

Received by OCD: 10/15/2024 2:45:57 PM

Office Location Lubbock		ocon	Laboratory: Address:							CHAIN OF CUSTODY ANALYSIS REQUESTED						Y RECORD LOG. LAB USE ONLY DUE DATE: TEMP OF COOLER J Z		
Office Location Project Manage	02	P			Contact:							WHEN	WHEN RECEIVED (°C) Page 1 of 1					
ampler's Name		Brett De		į.	SRS #: Sampler's Sig	natup	e /	7			Od 300)	face						
7	R157026			Project Name West Lovingto	n Strawn Unit #8		/V	No. T	pe of	Container	PA Meth							
Date	Time	Comp	Grab	Identifying Marks o		Start Depth	End Depth	250 ml Poly			Chloride (EPA Method 300)							
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equished by (Signature)	STATE STATE OF THE PARTY OF THE			Date: Time:	Received by (Signature)	-				Date:	Time:	-	1		Kristin	a.koni@	terracon.c	om
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emer VOA	40 red visit		N/G - Ambe	er Glass 11. 250 ml = Glass wide mouth	P/O - Plastic or other													

Appendix B Monitor Well Logs



mind Client west Lovington Strawn Unit # 8

Energy Resources Corp OCD case #IRP -2457 WELL COMPLETION MW-9 SCHEMATIC OF TRIPLE NESTED MW-9: mw-9 (Deep) + mrs-9 (middle) + mw-9 (Shallow) 8-in borchole white walker 11-40'= bentonite cement great to 73 695 40'-45'=3/8"bentonite chips soal 45- 40: 10/20 sand pieter pack 0,020 BEHORNE LR9/14/21 -50'-70' = 2' SCH 40 PVC 0.020" slotted screen 60 73-123'=3/8" bentonitechips seal 96 100 110 123-147'= 10/20 sand pilkspack (PE -128'-143' = 2"SCH 40 PVC 0.020" sea Head screen 130 143-145' = 2'sump + endcap 140 147'-170'=3/8" bentonite chips soul 160 170'-194'=10/20 sand filter pack 170 175'- 190'=2"SCH 40 PVC 0,020" scottad screan 180 : tigo - 192'= sumpt endcap 190 :: 10:10:2: A. A. a. P. 194'- 197.5' = seough 111.5 bas NOT TO SCALE -

Pr	oje	ct:		,	Case H	Resources OCD - IRP-2457	She	et: 10f 4
	ocat					ovington Strawn Unit 48		
	ient				Dia	m on abade Energy	loh	number:
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		_	neth			Core CLS-600 Roto Sonic)	Bou	ing diameter: 10-in to 73 ft los 8-in te
	oring				711912	1 - 9/23/21	7	ged by: D. Brdason
VV	ate	lev	vei:				Date	e measured:
	T	SA	AMPL	E	-	SOIL DESCRIPTION		COMMENTS
depth (ft)	1	-			penetration		graphic	SOMMETTO
dept			number	(inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	grap	Monitoring well installation, geotechnical properties, analytical tests, instrumentation
_		7		5 3				
	1 *	P	-ole	_	0-0.71	Topsoil: Pine sand/siet) clay torga	nie 1	matter (7.54R5/4) and white
1	1			55	+++	0-7.5; caliche sandstone; very		0-7.5': PLD = 5,4ppm
18	-			>>	+			
	-				+++	pale brown (104R 8/2); feinto madium sand; well indurated;	dry	11-1-10-D-3-1000
		1			1	7.5'-12.5': sandstone / caliche	٦	7.5-12.5 1919
	1		1	55	+++	- same as above -		
-	+	-	_		++		-	
1	-		1	55	+ +			
					+	12 5'-17 5's or ofstone I colid		12.5'-17.5': PID=0.3ppm
			1		+ + +	12.5'-17.5': sandstone /calid		12.5 - 17.5 : 1 15 015 ppm
1	+		1	55	+ 1	- Score as a con-		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1	4		1	رد	++!	175' and debut love tola		17.5'-20.0'-PID=3.0ppm
					+++	17.5 - 20.01 sounds tome / caliche		
	1				+	20,0'-25,0' 1 sand stone / caliche		20.0 -25.0'. PID - 2.2 ppm
1	4			55	+ +	-same as above -		20.0 -23.0 11 12 212 pp. 14
1	_		- 1		++	-sume as the total		
					+ ++	25.0'-30.0', 55/caliche		25.0-30.0: PID=2.8 ppm
			-		++			
	1			55	++++	- same as above-		-
-	-	_	-		+ +	2001 2001	1	
			1	sp		30.0-32.0 = sugarlike sand; eig	1+	30.0'-37.5: PND = 3.6ppm
					17.7	brown (7.54 R 6/4); faingrained, w sorted; moist.	EDE	
	7			55/	, ,- '	32.0 - 37.5'; sand with thim 55-la	yes.	1
	+			SP	£ . =	32.0 - 37.5 : sand with thim 55-la pink (7.542 813); very Rue to fine so	ud;	
						ss slightly culcareous; damp.		
	1					32.0 -37.51 summes above (7.54R7)	Doin	4:
		_			: , , ,	subungular to subrounded	-	1
	-			55/		37.5-45.0=5 ame as above		4
	-	1		150	1 - :-	(44'-45' colcaseous sandstone lay	pr.	
				, 21	T. T.	451-481 same as above		
1								
1	-				,	48'- 52:51 sugareile sand, light		-
		_		/ 4		reddish brown (53R6/4); well sorte	d;	1
				SP		fine examed sand : subrounded!	mol5	1 49'-51'= capillary fringe (=very me
						A+ 44 -5 1 = UCH MA/S+		
	-				:	MISI - 3315 array (mother) (ng	odo	detected), wet. 52,5-53,5: PID-14,1
1	_			in		55,0 -60.0 ! Sugarfilla Desa sound!		
1				SP	1	reddish yellow (54R 6/6): well		
	7					reddish yellow (54 R 6/6); well surled subrounded irregulas thin SS layers which are slight		
1						thin SS layers which are slight	Hy	

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	depth (ft)	interval	number	(inches)	standard SOIL DESCRIPTION senetration Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic	Manitoring well ins	MENTS tallation, geotechnical I tests, instrumentation	
	1 1 1 1			SP SP	: 60-70 : sugastike sound- reddish yellow C54R6/6); subtounded; well sorted; it regular thin layers of slightly calcarous sandslone saturated	2		-	
	1 1 1 1			sp sp	70'-80': sugarlike sand;			-	
0 000				50 53 50 50 50	80'-85': sugastille sand; - same as above (83'-84'=cal casous sands for 85.0-87.5': sugastille sand same as above At 86,5-87.5': calcasous SS	e)		-	
0		7		SP.	87.5'-97.5' supartike send; reddish yellow 55 8 6/6); subrow well sorted; thin, saturated. CSS very rare to non-existant 97.5-107.5' = Supartike sand - same as above -	nded	(;		
	1 1 1 1			SP	107.5'-117.5'. sugarlike soud - same as aboye-				
2				SP	A+ 12.5'-114.0': grey mothing mo	led	·		
5,5	-	41		SP	At 115,0 -115,5 = calcarous sound;	sten	a		

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3			1	standard penetration	SOIL DESCRIPTION	- ½ -	COMMENTS	
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-					and is a sugar ile sound	1		
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				* , ,	sahirated.	1		
-			SP	1	NO ss atall		-	
-								
_								
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			SP	* 1	same as above		1	
		1		-		+-		
- 2			SP	1			-	
-		1		1			Not: 147,5-148,5 above -	
			SP		A+ 147.5-148.5: 55 ; to very hour	1	the 55 gray sugarsand	
-			35		with gray staining above		PID: 2. 4 mm Vinyl-odo	C*
- 5					148.5'-157.5': sugarlike sand;		PID: 2. 4 ppm "vinyl-odo very hard drilling on	
		-	SP		fine sand subrounded, well	-	3	
-	1	1	PF		toched : L.			
		1			At 155' some very fine sand w distinkt contact; looks more yellowish red than reddishye	thou		
		1		1 .	distinkt contact; looks more	Dans !	548/6/2540010	
-			SP		January Tea That Teadle 19		-	
V .				1 10	157.5'-167.5'= sugareille sand,		4	
-	-	-			fire sand, subrounded, well	1		
	1	1	SP	, ,	sand and silt day; getting	Lanese	-	
				, ;	7/7 11.2			
		1			167.5'-177 5's sugarcike sand		1 . 7	
	1	1	-		more yellowish red looking the	au.	-	
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	-	-			siet/clay in matrix; wet to u	oy m	dist;	
		1	SP		very dense.			
			1		127 - 10/ 01		1	
		1			- 40 above -		1 4	
	1		10		A+ 183': drilles reports very den	50	-	
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	1	1 3	1	1	sound/siet/ clay with increasi	1		

Clie Drill Drill Bori	er: ing i	meth	nod:	Diam Trey Sonic	1RP-26 In Resources OCD casett Louington Strawn Unit the sondback Energy Cain Core CLS-600 Roto Service) [21 - 9/23 21	Sheet: 40C4			
depth (ft)		AMPL B		standard penetration test results	SOIL DESCRIPTION	graphic	COMMENTS	3	
deb	interval	number	(inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	8	Monitoring well installation, geotechnical properties, analytical tests, instrumentation		
-					see previous p. 3 , continued:				
-					occasional mm-size rounded rock fragment/ pelable voug moist]	
-			60/		186.0'-188.0': very fine sand (trace	Pines			
-			SP/SM		madium sound; color more to substitute	44	Carous NOTE: 188'b	-	
-	_		SME		subangular to subrounded : slight 5-7 % silt clay; was to maidy	Tense	"TRIMSSIC" RE		
-			01/		188.0 - 195.0 = voy fine sand with sich	1 - de	be Hom some	1-219	
-			150		matrix; color more to reddish hus; slightly calcalous with mothed an	1000		188.5	
-				tstone	slightly calcaeous with motted app very dense moist (lacking the pebbles from previous wells).	rock	fragments)	+	
-			ML					+	
	7				sand/sill clay; eight greenish a (GLEY 1 / 7.1); moist to dam	mu		=	
1					(GLEY 1/7.1); moist to dam	p.]		1	
			1		196.0'-197.5' \ siet; siehy-clay	Sall .	ery	7	
					fine (subangular) sand; rares	Tam	7/1	7	
					dettil 1 1 06 · · · · · ·			7	
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lie ril	ject: ation ent: ler:	n:		west Diamo	Resources OCD LAP- 2457 Lovington Strown Unit # and back Energy Maples	_Job _Tota	number: al depth:	10,4	
Drilling method: Boring date: Water level:				Sonicc 9/15/21	ore CLS-600 Roto Sonic) - 9/17/21	Log	ng diameter: ged by: e measured:	L. Anderson	
3		SAMPL	E.	standard	SOIL DESCRIPTION	1	СОМ	MENTS	
depth (ft)	interval	number	(inches)	penetration test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic	Monitoring well ins properties, analytica	tallation, geotechnical I tests, instrumentation	
-			45	+ + + + SHS 1	pine sound with silt cloud to organi ma Hes; dry; white calliche frages 0-7.3 : caliche with	2015	0-2.5'.F	-	
1		1	SP	- SPI	any, very hard	1	7.5'-15.0	': PID =	
-			SP	9.2	medium songrained; well industrial - 12,5; sugarlik sand; pi	w/col		-	
			55/50	55/sp	(54 (2 7/4); very fine to fine so subrounded to subconqueer, d 5% caliche no dules, well sorte	wal ;	15.0-17.5	:':PiD=	
-			WV	=	1215 Soundstone; pinkish u	1:4		-	
			54/5/	35/50	C7.54 R 8/2); layers of 55 wir very fine to fine 5 and layers; caliche cemented (calcare our very hard, dry, (171-27 55 les	+4	word).		
			SP	-	27:0- <49.0) = Sound (pink				
1 1 1 1			st		rey fine to fine, sub angulo to sub rounded grains, well sorted; sporadic Line gular calcaeous ss-layers, day. The transition to sugarsand is	0	3		
-			sp		gradual 47.5-50ftdamp reddish yellow(546/4)			-	
171					491- = sugarsundipiuk	4		= wery moist = -	
1 1 1	*		SP	'SP	(55/27/4); finegrained, sub- rounded i well sorted, 50/525 very moist = capolilary for 52'-55'- wet At 55'=5 a turated At 51-52: moderate/ eight gre	ge.	52.0-52.0 52.0-55.0 52.0-55.0 50.0 PIDGD-52 peoloration	wed]	

		nvir				LRP-2457	4		
Pro	oject:			Fueren.	· Resources OCD Case +		Shee	·†·	2 of 4
	catio		100		lovington Strawn Unit		Office		
	ent:		-	West L	ating in snewn Unit		lab	number:	
	iller:		16	DIAMO	ndback Energy				-
				Juster	Maples / Trey Cai Core (LS-600 Roto.	4		depth:	
		meth	od:	Sonic	ore CLS-600 Roto.	Sonic)		ng diameter:	
	ring			9/15/2	1-9/17/21		Logg	ged by:	L. Anderso
Wa	ater l	evel:			05000		Date	measured:	The state of the s
_									
5		SAMPL	E	standard	SOIL DESCRIPTION		U	СОМ	MENTS
depth (ft)	interval	number	(inches)	penetration test results	Color, soil type, relative density or co- mineralogy, USGS classification moistu	nsistency, re content	graphic		staflation, geotechnica al tests, instrumentat
	1				continued from p. 4				
1	-		SP			1.			
1	1		-1	· .	subrounded pinesa	naj	,		
	1			1	saturated, done of the fame of	an about	1		
1		1			of same frie cagers of	Lengas	sne		
1	1				47 C 77 21	-crosper	suc.		
-	-	-		-	67.5-77.5'! sugarec	und			
1	-				same as above	Hate			
1	1	1	SP	_ ", "	some irregular la	ge S	0		
1		1			with calcareous au	man	11/		
1	1								
1 3	4	1			77,5 - 87,51: Sugar.	sand			
_	1				same as ab			26	
1	1			, 1					DIN-10
	1			. , .	at 78'-80': mediu	m gray		18-80 =	PID=69pp
	7		SP		dis coloration				
15	-		-	1. :					
1	-	1		1	87.5-97.5 > sugarso	and			
	-	-		111					
					Some as a boo				
1	1	1			At 93' no more 55	indus	ions		
	7		SP	2 1					
10	+		>1	' '		1		-	
10	4				07 5 10 5	,			
					97,5-107,5: sugars	sand			
				:	same as above				
1	7								
1	-		SP	., .					
1	-		21	-					
1	-	1							
					107.5 - 117.5 Sug	ascond			
				1.	some as abo	7			
	7		1		sandstone for	yes		-	
	-		SP		Markot & Anches	cons:		9.1	
1	1		-		->at 112.0' -112.3' 60	25			
1		1	1		116,6-117.0 de	2			
	7	1			117.5'-127.5 sugar	,			
1			1		ILIO - ILTO SUPAT	Som of			

						Geological Services, Inc.			
		ect:		_	caseA	1 1 P - 2457	She	et:	3064
		ation	1:			Covington Strawn Unit 48	,		0:-
(Clie	nt:				and back Energy		number:	
I	Drill	er:			Trey	Cain	Tota	al depth:	
L	Orill	ing r	neth	nod:	Sonoc	Core (LS-600 Roto Sonic)	Bori	ng diameter:	
E	Bori	ng d	ate:		9/15/	21 - 9/18/21 9/17/21	Log	ged by:	L. Andosos
V	Nat	er le	vel:				Date	e measured:	
		-	AMO	-		201 000000			
	3		AMPL	-	standard penetration	SOIL DESCRIPTION	hic	COM	IMENTS
	depth	interval	number	recovery (inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic		stallation, geotechnical al tests, instrumentation
	-	.5	=	2 5				properties, analytic	ar tests, instrumentation
				SP	; .	117.5 - 127.5 on brevious page			
				-		1.3			
						127.5- 137.5' = sugarsand			
	=			SP		reddish ye coo C54R 6/6); Pine			
-	-		-		,	127.5- 137.5' = sugarsand reddish yellow (54R 6/6); fine sand; subrounded, well sorted; wet			
	-			-	** • .	sorrea , was			
	-			SP	, ,				
		-			. ,				
						137.5'-145.0'; sugarsand,	1		
				SP		same as above			
						A+ 138'-140' medium gray		NOTE: 13	8'-140'=gray s
	7			SP	3.	overall hand dilling 484			0 0
	1				1, 1	overall hand drilling to	36 15	-140	-
	-				1, 1,	145'-155'= sugassand			
	-			Sp	A A A	74			
-	-			EA	7-VIAV	VI			
	-			SP	, ,				
	+				1,1	155'-157.5' = sugarsand		9.	
	-			1	; '				
				SP		157.5-167.5; sugarsand			
Ī						color slightly more to ward	5	-	
	7			sp	. ,1 ,	yellowish read probably due	9		
	-			-	1	trace of clay (1%), but shel			
	-			1		fine sand, subrounded, hard dilling; wel; well sorted.	-		
	=			co		163 d 137 C'			
			-	SP		167.5-177.5' 1 Sugarsand			
				SP	1	with 1% day, reddish yellow (54R 616); well sorted, wet, getting denser still	1		
				36	,	(5 yk 616); well sorted;			
		9				wer gering densers the			
	-				٠	177.5-187.5 on page 4 of 4 (see below!)			1.3
		- 1				177 - 107 - 1			

					& Geological Services, Inc.	2	
	Proje Loca Clien	tion:		west	Resources OCD Case#1RP-	Shee	number:
	Drille			Trey	modback Enorgy		al depth: 197.51 ba
	Drillin	ng me	thod:	_	one (LS-600 Roto Sonic)		ng diameter: 10 " 1073" bes ou
		g dat	e:		21-9/17/21	Logo	ng diameter: 10 " 1073" by s ou ged by: L, Anderson
	Wate	er leve	el:				e measured:
		SAN	IPLE		SOIL DESCRIPTION		COMMENTS
1)	depth (ft)	-		standard penetration		graphic	
	dept	interval	recovery (inches)	test results	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	grap	Monitoring well installation, geotechnical properties, analytical tests, instrumentation
180	-		1 20	:	177.5'-187.6' sugareila fine said	,	
	-		SP		reddish yellow (54R 6/6); dense; wet	i	
	-		100		A+181 = 1% mm-si 20 rounded rock fragin	ents	
187	-		Sp		some very Pine sand; 2% 51 et/clay= 51	Orsey	
107			se/sn	7	5-7% colligan shighter colcarous	dium	sand),
190			sp/sn		5-7% silt/clay, slightly calcareous;	28,	AL 101011
190	-			-	web to moist, 191.0'-194.5'; very fine sand with sie		At 191 Pt bas
			SM		clayen matrix; color changes to me	-	"TRIASSIC" Red Bed bottom of screen @ 1915 "
1945'-				-	pine "sugarlike sound, slightly calcare	dus	bonom of science 1113
	1		ML		with a mothand to where ! 1-2 % round	00//	
197.5	7		ML	1	subrounded rock page pelobosound co nodules; moist; very haddrilling.	LI CHE	
1100	777		1		194.5-197,5', silt; silty-clayer		
	-				angular very fine sand; red (2,54 R	5/6)	,
	-				10% small pebblos and larganasto	grain	s, ·
	-				dry; very hard drilling; separates hori zen fally along tregular thin		
	-				layers of clay (irregular bedding	olama	(52)
		_	-				
	-						
	-		3				
	-						
	1						
1							
	-						
							, , , , , , , , , , , , , , , , , , , ,
	-						
	-						
4	-						
			1				

					1 RP	-245	7	
oje	ect:			Energen	Resources OCD Caset	Shee		194
ca	tion	:		west	ovington Strang Unit #8			
ier	it:			Diam	ondidack Energy	Job	number:	
ille	er:				m maples	Tota	l depth:	197,5 1695
illi	ng n	neth	od:	_	Core (LS-600 Rotosonic)	Borin	ng diameter:	10-in to 70' and
rir	ng d	ate:			1-9/13/21	-	ged by:	2. Andoson
at	er le	vel:					measured:	
	S	AMPL	E	standacat	SOIL DESCRIPTION	1	COM	MENTS
	Nal	ber	es)	penetration test results	Color, soil type, relative density or consistency,	graphic	Manitoring well ins	tallation, geotechnical
1	interval	number	(inches)	CA	mineralogy, USGS classification moisture content	6		I tests, instrumentation
+	-	-	-		-0.71 August 11/	263		
1				caliche -	-0.71 :top soil; dark brown (7.53R) madium/him sand sict, clay, roots	5/3)		4
					madium/fine sand siet, clay, roots Louse, moist. At 0.5 start mm-size		2.5'-10 10	PID=2.1 ppm
			55	L' + . + . ' .	caliche hodules (white) 0.7'-2.5!, caliche, white, dry			
1					1.5'-7.5' : calcareous SS; piulcishadi	Lwhi	te	
1				L 1 1 1	LOUD DISTINGHAM 1'chiand	1.0		
+				+ + + +0	som diam; pea-size awarded to	undo	deravel Ctr	ace)
1				1 1	SI-2451	neoli	well sorted.	
1		1		+ 1	1.5'-2315; calcareous SS;		101-20. DI	D=0.4ppm_
1		- 0	55	+ -	- same as above -	1	10 -2017	D. 0. 11 P. 1
1	1			+	* calcium carbonate cement	ed		-
4	- 4			+++	Sandstone			4
-			_		19.5-52,51:			
1				ETP	sandstone SS; pink (54R7/3			
1			35/	++	with irregular			7
1			SP	1	equers of well sorted sp.			-
1					the se visible in the SS an	4		+
1				_, -	trace of mm - size subrounds	el	1	
1					rock fragments, cacos cement	ed.		
1				'	cali che fragments less tha	4		
1			55/	-:	10 % ; Dry			-
1			1SP		- W			
-							3-11	
1				7	and the second second	1		
1				~'I	4+39-50 pinkishgray CSYR7/2			7
1			54	1, 1	dry.	1		
1			/sp	7. 7	0			-
1								-
1								
1								
1			55/		1449 moist formation: well	Score	ol	7
+		-	Isp		sugar sand with small irregu	yes-		00 -00 0
4			1.31		lenses of ss; fine subrounded	1	52.5-55.0	PID = 99.9 ppm
7				1	Sand is the same	00-	55,0 -57.	D' PID=145.8 ppm
1	.00				52,5' - 57,0'= very moist = cap;	ware	mige C	OILS IR 744)
1			SP		At 52' saturated	-		-
4					54.5-60.0') gray discoloral 60.0-61.0' and "vinyl"-016	TON,		1
			1		- MANN Ahus - Oil	a land on	400 11	THE PARTY OF THE P

					7	1RP2457	4.	2-01	
	ect:			energen	Resources Corp OCD Ca	Shee		2014	
	nt:	1.		Niest !	molback Energy	In JAS	number;		
	er:			Deam	in he can		depth:	107 5	
		math	ad.	Sus	ten mayar	Poris	a diameter	197.5	10:4
	100	metho	ou.	Some Co	me (LS-600 Rotoso -9/13/21	nic) Don	ig diameter.	10 in to 70 and	(010
		date:		719121	-7/13/21		measured:	C. Moderson	
rai	cor ic	V CI.				Date	measureu.	_	
1		SAMPLI	E	standard	SOIL DESCRIPTION		COM	IMENTS	
depth (11)	interval	number	(inches)	penetration test results	Color, soil type, relative density or or mineralogy, USGS classification moist			stallation, geotechnical al tests, instrumentation	
1				-1. 1.	59'- 67'= sugar sand			-	7
-					Secretary de 19	5)			
-					reddish vallows	p 4/c)		94	
-			SP	. SP.	5019			-	5
1		Ross	2053	67,0-67.5	67.0-77.5: Lost 0.5	Pine well		-	
					A+67.5 Pl; sugarsound	C 54/2 5/6) red	ldish yellow		
				1 1	soft, saturated; less	than 1%		-	
					of mm-to cm-sizes gravel/salcareous so	ubrounded			
				SP.	concretions.	unsim			
-				MARANA	At 72,5'-73,0: approxi	nately			
-					stone in calcareous	es sand sad	-	-	
-	-				(Nodules).	fine sand			
-				.5pi				-	
-		1		-CD	77.5-87.5! same	5/6)		1.2	
_				7	A+ 78,5-79,0'7 calca	eous	e e		
					A+ 84.0'-84.5') Sunds	e sand matrix			
				SP	c as accord,				
				. 'S P.	37,5-97.5- same a	sabove			
-					reddish gellow				
-			0	\$	94,3-94.7 approxima	edely			
-			1.	1 1	94.3-94.7 approxima 5 of calcareous same	Lstone			1
-	(10	Add	A MARCHA	in fine sand man	140000000			
-		-		,	17.5 - 107.5 : same a	.)			-
_				- 1 re	daish yellow (54,2 6) At 104-104.5'= calc. no	6)			+
				SPi.	an alecte			1.	-
			-	===	1+ 105.5-106,2 = calcin	dules 55			
					107.5-117.5 = same	asabare			1
				(0'	154R				
				1	redde 4 yellow				-
				====	4+1/2.1-112,7'= calcino			- '	
-	, at .			5P'	in non-calc. fine sund			1	
-				5		odulasss			
	1		. 11	SPINS	un non-calc frue sa	ud !	an-	- 1	-
			-		ACADI - Land				
					edding relation	Ho / Sun l			

-	-					Geological Services, Inc.		ring ID:	mw-9
		ject:			OCD	Resources Corp. Case# 1R12-2457	Shee	et:	3#of4
		ation	1:		West .	Lovington Strawn Unit *8	1=1	armit san	
	Clie				Diamo	ndback Energy		number:	
	Drill		1	- 1	Sus	ten maples		al depth:	197.50
			neth	oa:	Soni	c Core (15-600 Roto Sonic)		ng diameter	10" to 70 C)
		ing d			9/9/2	21 - 9/13/21		ged by:	L. Ando
	wat	ter le	evel:				Date	e measured:	
		S	AMPL	E	standard	SOIL DESCRIPTION		COL	MENTS
	depth (ft)	Nat	per	es)	penetration test results	Color, soil type, relative density or consistency,	graphic	Monitoring well in	nstallation, geotechnic
	deb	interval	number	(inches)	(ce)	mineralogy, USGS classification moisture content	90		cal tests, instrumenta
20			-	-		117 6 137 6 / / /			
					.50	117.5'-127.5' sugars and reddish yellow C54R 6/6), mostly fine sand, subrounded, well sorted,			
						saturated (No more calcareous			
						nodulas present.)			
	1					127.5-137.5: same as above			
)		-			-				
	-				. , 1-		}		
	-			0					
	1			9	Sp'		-		
						137.5'-147.5' , same asaba	e		
0									
	1								
	1 -								
	1 -				Sp	147.5- 157.5' same as above			
	1 4								
0						from approximately 152.5'			
					. , , ,	still sugars and but slight	TRO	lual	
	1				2 "	yellow to yellowish red CSYR	5/2)	-	
	1				SP'	also trace amount of silt clay	101	1	
	1 7	+				also trace amount of siltiday in matrix and subrounded to	,		
	1 -					sub angulas grains; saturate			
0		-	-	-	1	157,5'-167,5' = asblowe			
			1						
	1 3		1	1 *	SP.	167.5'-177.5: sugarsand			
					1.	yellowish red (5425/6):			
	1				1. ".	as above; but a lot olenser			
0			-			male hand of Dans gradual	4		
	-				1	getting denser.	7		
	-			1	1:00	177.5'-182,5' sasabovebuta.	Pal		
	1 _	-	1		SP.	denser, hardes drilling, wet.	1		
				-	1 . 1	7	1		
-	7				1 - 1		1		
0	-		_	_	1'		1		

						Recological Services, Inc.			
					West Lo Diamo	unglon Strawn Unit #8 and back Energy	Job	number:	-
	Dril Bor	ling r	late:	od:	Sonice	n Maples Core CLS-600 RotoSonic) 1-9/13/21	Borin	ng diameter: 10-into 73 bas +8-in- ged by: LAndoson	0197
	Wa	ter le	evel:				Date	measured:	
	(tr)		AMPL		standard penetration	SOIL DESCRIPTION	Jic.	COMMENTS	-
_	depth (ft)	interval	number	recovery (inches)	test esults	Color, soil type, relative density or consistency, mineralogy, USGS classification moisture content	graphic	Monitoring well installation, geotechnical properties, analytical tests, instrumentation	
כ				SP		182.5 - 186.0 : fine sugarlike su yellowish red to reddish yellow, u sorted, subrounded, but siet/clo	ed;		
6	1 1			SP SP/SM		1% mm-site rounded rockfragment	oth.		
	1			SW/SC		tage quotegrains; saturated. 186.0'-190.0's very fine to line sa -subangulas, clay soft 5-7%; so	d;	A+196 ft bas! "Triassic" Red Bed	
	1 1 1			ML		culcareous; wet 190.0' -193.0'; mosky very fine son submerbas; yellowishred C54R 5 5-7% sult clay; calcareous ur	a;	(bottom scream at 190'bgs	
5	bas			ML		mottled appearance; moist f	dany	o, vergland	
	-					193.0'-197.5'= silt/silky-clayer angular fine sand; red (2.54R 5)		-	
	-					trace rounded pebbles and graves to 35 mm diametes; matrixslicalcaseous; very small crustal comagnetite?), very hard, dry	ghter	3	
						Separates horizon ally alon irregul).		
		4							
	1								
	-						_		
	-	*		-					





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1 2013 JAN 10 1A 10: 30

I. GENERAL AND WELL LOCATION	MW-1 WELL OWN Energen WELL OWN 904 MOO WELL LOCATIO (FROM GE	Resources ER MAILING A TE AVENUE DN LATTI LONG N RELATING WE #8-R West	Corporation DEGREES 32 SITUDE 103 LL LOCATION TO STREE	58' 24" FACTORESS AND COMMO WIN Unit Location DRILLER	MINUTES SECONDS 58' 21.48" N 24" 09.32" W ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWN I'M Unit Location 1980' FSL & 660' FWL of Secritor (Section) For the complete of the complete			OWNSHIP, RANGE) WHERE AVAILABLE		
NOI	12/11/12	D WELL IS:	2/12/12 O artesian					VEL IN COMPLETED W	,	
INT	DRILLING F			C HAMMER C CABLE TOOL C OTHER - SPECIFY:			ER - SPECIFY:			
DRILLING & CASING INFORMATION		(feet bgl)	BORE HOLE DIAM (inches)	CASING MATER GRA (include each cas note sections	RIAL AND/OR DE ling string, and	CA	ASING NECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
8 C	0	49	6 1/2	PVC Casing		FJ FJ		2	Sch 40 Sch 40	0.010
2. DRILLIN	49	69	6 1/2	PVC Screening						
N I	DEPTH FROM	(feet bgl)	BORE HOLE DIAM, (inches)		NULAR SEAL M. ACK SIZE-RANG			AMOUNT (cubic feet)	METH(PLACE	
TERI	0	40	6 1/2	Grout					Tremie	
ANNULAR MATERIAL	45	69.6	6 1/2	Bentonite Chip 8/16 Sand	S				Tremie Tremie	
3										
	OSE INTER	RNAL USE			POD NUMBER	. 1		NUMBER 5/	& LOG (Version 06/	08/2012)
	CATION				1.02.1.01120	<u> </u>		· · ·	<u></u>	E I OF 2

- 1	n nome of	6 . 1 . 1				PARIL CARREST
1	DEPTH (ieet ogi)	THOUSIEGG	COLOR AND TYPE OF MATERIAL ENCOUNTERED -	WATER	ESTIMATED YIELD FOR
İ			THICKNESS	INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZON	ES BEARING?	WATER-
	FROM	TO	(feet)	(attach supplemental sheets to fully describe all units)	(YES / NO)	BEARING
		ļ				ZONES (gpm)
	0	30	30	Tannish White Clayey Sand with Caliche		
	30	35	5	Tannish Brown Hard Sandstone	OY @ N	
	35	71	36	Tannish Brown Medium to Fine Sugar Sand	CY ® N	
		-			OYON	
}				<u> </u>		
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3		ļ. <u>.</u>			OYON	
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OF.					OYON	
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ij					· · · · · · · · · · · · · · · · · · ·	
중		<u> </u>			U U	
3						
푎					CYON	
4. HYDROGEOLOGIC LOG OF WELL					$C^{Y}O^{N}$	
4					CYON	
ı	·				$O^{Y}O^{N}$	
İ		·			OY ON	
ł	 					
ł			 			
					<u> </u>	
٠ ا					$O_A O_N$	
					$O_A O_N$	
,	METHOD U	JSED TO ES	STIMATE YIELD	OF WATER-BEARING STRATA: CF PUMP	TOTAL ESTIMATED	
	C AIR LIF	т 💿	BAILER (OTHER - SPECIFY:	WELL YIELD (gpm):	
	WELL TES	TEST	RESULTS - ATT	TACH A COPY OF DATA COLLECTED DURING WELL TESTING, IN	CLUDING DISCHARGE	METHOD,
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NO	OSE POD NL	IMBER ((WELL)	NUMBER)				OSÉ FILE NUM L-13218	PODO			<u></u>
ΆΤΙ	WELL OWN			Corporation				PHONE (OPTI	ONAL)			<u> </u>
100	well own			Corporation		 		CITY		STATI		ZIP
GENERAL AND WELL LOCATION	904 Mooi							Roswell		VM		-1144
AND	WELL	7		DEGREES 32	MINUTES 58'	SECOND 19.10"		ACCURACY REQUIRED: ONE TENTH OF A SECOND				
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	WD1222		ļ	NAME OF LICENSED Lee Peterson				NAME OF WELL DRILLING COMPANY Peterson Drilling & Testing, Inc.				
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LOC	LATION											

	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING
				(attach supplemental sheets to fully describe all units)	(123/10)	ZONES (gpm)
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POD NUMBER

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PAGE 2 OF 2

FILE NUMBER

LOCATION



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STATE ENGINEER OFFICE ROSVEL

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	i	MBER (WELL	NUMBER)				OSE FILE NUI	MBER(S)			
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GENERAL AND WELL LOCATION	WELL OWN		Corporation	_			PHÔNE (ÓPT)	UNAL)			
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ER	(FROM GP	S) LONG	GITUDE 103	24'	03.66"	w	DATUM RE	QUIRED: WGS 84		_	
SE	DESCRIPTION	RELATING WE	LL LOCATION TO STREET	ADDRESS AND COMMON	LANDMARKS - PLS	S (SECTION, T	OWNSHJIP, RANG	E) WHERE AVAILABLE			
-	Energen :	#8-R West	Lovington Strav	vn Unit Location 1	980' FSL & 6	60' FWL o	of Section 34	l, T15S-R35E, Lea	County	,	
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	LICENSE NU WD1222		NAME OF LICENSED Lee Peterson	DRILLER				Peterson Drillin			
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}				· · · · · · · · · · · · · · · · · · ·		<u></u>		STATIC WATER LEV	EL IN COM	PLETED WE	LL (FT)
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	DEPTH (1	Seet hall				ESTIMATED
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	OSE INTER			UZD 20 MET	L RECORD & LOG (Ve	·

POD NUMBER

TRN NUMBER

PAGE 2 OF 2

FILE NUMBER

LOCATION

OSE POD NUMBER (WELL NUMBER)

Energen Resources Corporation
WELLOWNER MAILING ADDRESS

WELL OWNER NAME(S)

904 Moore Ave

WELL

LOCATION

(FROM GPS)

LICENSE NUMBER

DRILLING STARTED

DRILLING FLUID:

FROM

49.7

DRILLING METHOD:

DEPTH (feet bgl)

WD1222

12/12/12



MW-4

GENERAL AND WELL LOCATION

DRILLING & CASING INFORMATION

~

WELL RECORD & LOG

MINUTES

DEPTH OF COMPLETED WELL (FT)

O DRY HOLE (SHALLOW (UNCONFINED)

CASING MATERIAL AND/OR

GRADE

(include each casing string, and

note sections of screen)

CABLE TOOL

58

24

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIJP, RANGE)
Energen #8-R West Lovington Strawn Unit Location 1980' FSL & 660' FWL of Section 34,

SECONDS

17.54"

04.64"

ADDITIVES - SPECIFY:

OFFICE OF THE STATE ENGINEER

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DEGREES

NAME OF LICENSED DRILLER

70.2

Омир

C HAMMER

PVC Casing

PVC Screeing

32

Lee Peterson

DRILLING ENDED

LONGITUDE 103

12/13/12

AIR

6 1/2

6 1/2

ROTARY

BORE HOLE

DIAM

(inches)

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COMPLETED WELL IS: C ARTESIAN

TO

49.7

69.7

STATE ENGINEER OFFICE ROSWELL TO THE STATE

OSE FILE NUMB

PHONE (OPTION

* ACCURACY R

• DATUM REQU

L-13218

CITY

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BORE HOLE DEPTH (FT)

OTHER - SPECIFY:

CASING

CONNECTION

TYPE

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FJ

Roswell

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1 2017 .	IAN 101	A 10	31
ER(S)			
AL)			
. 1	STATE NM	88201	ZIP -1144
EQUIRED: ONE TENT	TH OF A SECO	ND	
WHERE AVAILABLE T15S-R35E, Lea	County		
NAME OF WELL DRI	LLING COMPA	ANY	
eterson Drillin	g & Testin	g, Inc.	
DEPTH WATER FIRS			_
STATIC WATER LEV	EL IN COMPL	ETED WEI	.L (FT)
·			
CASING INSIDE DIAM. (inches)	CASING THICKN	VESS	SLOT SIZE (inches)
?	Sch 40		

Sch 40

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DEPTH (feet bgl) LIST ANNULAR SEAL MATERIAL AND AMOUNT METHOD OF BORE HOLE 3. ANNULAR MATERIAL PLACEMENT DIAM. (inches) GRAVEL PACK SIZE-RANGE BY INTERVAL (cubic feet) FROM TO Tremie 6 1/2 Grout 40.5 Tremie 40.5 46 6 1/2 **Bentonite Chips** 46 70.2 6 1/2 8/16 Sand Tremie

FOR OSE INTERNAL USE		WR-20 WELL RE	CORD & LOG (Ver	sion 06/08/2012)	
FILE NUMBER	POD NUMBER	5	TRN NUMBER	51745	<u> </u>
LOCATION			_		PAGE I OF 2

	DEPTH (THICKNESS	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES	WATER BEARING?	ESTIMATED YIELD FOR WATER-
	FROM	ТО	(feet)	(attach supplemental sheets to fully describe all units)	(YES / NO)	BEARING ZONES (gpm)
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,	30	35	5	Tannish Brown Hard Sandstone	OYON	
	35	73	38	Tannish Brown Medium to Fine Sugar Sand	CY ® N	
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FO	R OSE INTER	NAL USE		WR-20 WELL RI	CORD & LOG (Ve	rsion 06/08/2012)

POD NUMBER

TRN NUMBER

PAGE 2 OF 2

FILE NUMBER LOCATION



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MW-5	ER (WELL NUMBER)		OSE FILE L-13218	~ ` !		
WELL OWNER	JA NACION		ļ.	PPTIONAL)		- ·
	NAME(S) Sources Corporation	n	PHONE	OF HUNAL)		
_	MAILING ADDRESS		CITY	· · · · · · · · · · · · · · · · · · ·	STATE	ZIP
904 Moore			Roswel	İ		1-1144
WELL	DEC	REES MINUTES SECON	NDS			
LOCATION	LATITUDE 32	58' 16.74"	N ACCUR	ACY REQUIRED: ONE TEN	TH OF A SECOND	
(FROM GPS)	LONGITUDE 103	24' 08.02"	w DATUM	REQUIRED: WGS 84		
DESCRIPTION RE	LATING WELL LOCATION TO	STREET ADDRESS AND COMMON LANDMARKS - P	LSS (SECTION, TOWNSHIJP, R	ANGE) WHERE AVAILABLE		
Energen #8	-R West Lovington !	Strawn Unit Location 1980' FSL &	660' FWL of Section	1 34, T15S-R35E, Lea	a County	
LICENSE NUM	ER NAME OF LICE	SED DRILLER		NAME OF WELL DR	ILLING COMPANY	
WD1222	Lee Peterso	n		Peterson Drillir	ng & Testing, Inc.	
DRILLING STAI 12/12/12	DRILLING END 12/13/12	DEPTH OF COMPLETED WELL (FT) 68	BORE HÖLE DEPTH (1	T) DEPTH WATER FIR	ST ENCOUNTERED (FT)
COMPLETED W	ELLIS: C ARTESIAN	O DRY HOLE SHALLOW (UN	CONFINED)	STATIC WATER LEV	VEL IN COMPLETED WI	ELL (FT)
DRILLING FLU	D:	O MUD ADDITIVES - S	SPECIFY:			
		C HAMMER C CABLETOOL		ER - SPECIFY:		
DRILLING MET				1;		
DRILLING FLUID: AIR DRILLING METHOD: ROTARY DEPTH (feet bgl) FROM TO DIAM (inches) 0 47.5 6 1/2 47.5 67.5 6 1/2		LE CASING MATERIAL AND/OR GRADE	CASING	CASING	CASING WALL	SLOT
FROM	TO DIAM (inches)	(include each casing string, and	CONNECTION	(inches)	THICKNESS (inches)	SIZE (inches)
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PAGE 2 OF 2

-	DEPTH (feet bgl)	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES	WATER BEARING? (YES/NO)	ESTIMATED YIELD FOR WATER- BEARING
				(attach supplemental sheets to fully describe all units)	(1257110)	ZONES (gpm)
	0	30	30	Tannish White Clayey Sand with Caliche	OY (N	
	30	35	5	Tannish Brown Hard Sandstone	CY ©: N	
	35	71	36	Tannish Brown Medium to Fine Sugar Sand	CYON	
					CYCN	
					OYON	
Ľ					OYON	
4. HYDROGEOLOGIC LOG OF WELL			ļ		CYCN	
OF.			<u> </u>		OYON	
507					\bigcirc \bigcirc \bigcirc \bigcirc \triangleright	
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700					OYON	
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		<u> </u>			CYCN	V 19
	METHOD (JSED TO ES	STIMATE YIELD	OF WATER-BEARING STRATA: O PUMP T	OTAL ESTIMATED	- 5 5
	C AIR LIF	т 🕞	BAILER C	OTHER – SPECIFY:	WELL YIELD (gpm):	31 100
Z	WELL TES	TEST STAR	RESULTS - ATT T TIME, END TI	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCL ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER	UDING DISCHARGE: THE TESTING PERIC	METHOD, DD.
NOISI	MISCELLA	NEOUS IN	FORMATION:		· · · · · · · · · · · · · · · · · · ·	
TEST; RIG SUPERVI						
SUP						•
RIG						
ST;]					TO LOCAL OTHER CO.	. VIII IOEVIARE
S. TE	PRINT NAM	ME(S) OF D	RILL RIG SUPEI	RVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONST	RUCTION OTHER TH	ian licensee:
	THEINT	Deleven	UCDCDV CCDTU	FIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF	THE ECONOLING IS	A TRUE AND
SIGNATURE	CORRECT	RECORD C	OF THE ABOVE I	DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL REC 20 DAYS AFTER COMPLETION OF WELL DRILLING:	ORD WITH THE STA	TE ENGINEER
NAT		ノ し	11	6	1 1.	
SIG	/ V		Pols	1 SE VETERSON	1/2//	3
· 6		SIGNAT	TURE OF DRILLI	ER / PRINT SIGNEE NAME	DATE	
EO1	R OSE INTER	NAL USE	<u> </u>	WR.20 WFII	. RECORD & LOG (Ve	rsion 06/08/2012)
	E NUMBER	arne USE		POD NUMBER TRN NUMBEI	 	

LOCATION



OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

		· · · · · ·									
	OSE POD N	JMBER (WELI	L NUMBER)				OSE FILE NU	MBER(S)			
NO	, ,	VLSU 8R A	ИW-б				L-13218				
ΑŢ		ER NAME(S)					PHONE (OPTI	ONAL)			
0	ENERGE	N RESOUR	RCES CORPORAT	ION							
LL	1	ER MAILING					CITY		STATE	ZIP	
GENERAL AND WELL LOCATION	3300 NO	RTH A ST I	BLDG 4 STE 100				MIDLAND)	TX 7970)5	
2			DEGREE:	S MINUTE	S SECONI	os	<u> </u>				
¥	LOCATIO		32				* ACCURACY	REQUIRED: ONE TEN	TH OF A SECOND		
₹	(FROM G)		ITUDE 32	24	05	w					
Z		LON	GITUDE 103				<u></u>				
	1		ELL LOCATION TO STREE								
-	CORNER	OF 17TH /	AND W GUM AV	'E & TURN INTO	GATE FOLLOW	CALICHE	RD. UNIT L,	SEC 34, TWP 159	S, R 35E		
====	LICENSE N	JMBER [NAME OF LICENSED	DRILLER				NAME OF WELL DR	ILLING COMPANY		
	WD-1711	ı	EDWARD BRYA					STRAUB CORPO	DRATION		
	DRILLING S	TARTED	DRILLING ENDED	DEPTH OF COMPLE	TED WELL (FT)	BORE HO	LE DEPTH (FT)	DEPTH WATER FIR	ST ENCOUNTERED (FT))	
	9-24-15	1		70'		70'		N/A			
						<u></u>		STATIC WATER LEV	VEL IN COMPLETED WE	ELL (FT)	
	COMPLETE	D WELL IS:	C ARTESIAN	C DRY HOLE	SHALLOW (UNC	ONFINED)		N/A		(/	
<u>S</u>			_	_		· · · · ·					
DRILLING FLUID: DRILLING METHOD: DEPTH (feet bgl) DEPTH (feet bgl) BORE HOLE DIAM (inches) TO' 50' 50' 10' 50' 10' 50' 10' 10											
R.W	DRILLING N	METHOD:	ROTARY	C HAMMER (CABLE TOOL	С отня	R - SPECIFY:				
E S	DEPTH	(feet bgl)	BORE HOLE	CASING MAT	ERIAL AND/OR		. spic	CASING	CASING WALL	SLOT	
8	FROM	то	DIAM	1	ADE		ASING NECTION	INSIDE DIAM.	THICKNESS	SIZE	
Sin	İ		(inches)		asing string, and ns of screen)	TYPE		(inches)	(inches)	(inches)	
\5	70'	50'	6"	SCH 40 .010 S		FJ		2"	0.154	.010	
હ	50'	+43"	6"	SCH 40 RISER		F)		2"	0.154	RISER	
N N	30	173	 	JCIT 40 RISER		1.5					
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	DEDT	/frat . 1)									
, ,	_	(feet bg!)	BORE HOLE DIAM. (inches)	1	NNULAR SEAL M.			AMOUNT	METHO PLACEN		
I	FROM	ТО	, ,		PACK SIZE-RANG	EBYINIE	RVAL	(cubic feet)			
LEF	뜰 70' 48' 6" 11 BAGS OF 20/40 SAND								TOPLOAD		
FROM TO DIAM. (inches) GRAVEL PACK SIZE-RANGE BY 170' 48' 6" 11 BAGS OF 20/40 SAND 48' 2' 6" 12 BAG OF 3/8 HOLEPLUG									TOPLOAD		
4R											
				-							
Z											
3. 4											
FOR	OSE INTER	NAL USE					WR-2	0 WELL RECORD	& LOG (Version 06/0	8/2012)	
	NUMBER	1 -	13218		POD NUMBER	7		NUMBER 5	70502		
LOC	ATION	M	lan				F.34	,2/3		1 OF 2	

	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES/NO)	ESTIMATED YIELD FOR WATER- BEARING					
	0	3'	3'	TAN VERY FINE SAND - CALICHE WITH CLAY	CYGN	ZONES (gpm)					
	3'	12'	9'	LIGHT TAN VERY FINE SAND - CLAICHE CEMENT SANDSTONE	 	N/A					
	12'	19'	7'	TAN VERY FINE SAND - SOFT SANDSTONE	C Y 6 N	N/A					
	19'	30'	11'	TAN FINE SAND - SILICEOUS SANDSTONE	CYGN	N/A					
	30'	61'	31'	TAN VERY FINE SAND - SOFT SANDSTONE	CYGN	N/A					
	61'	70'	9'	TAN VERY FINE SAND	CY 6 N	N/A					
ELL	TD	70'		TAN VERT TIME SAME	CYGN	N/A					
4. HYDROGEOLOGIC LOG OF WELL	<u> </u>	70				14/7					
050					CYCN						
). 			<u> </u>		GYCN						
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E					CYCN						
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) CONTION I	10ED 20 E6	TIME TO SUITE	OF WATER-BEARING STRATA: PUMP TO	TOTAL ESTIMATED						
		C AIR LIFT C BAILER C OTHER - SPECIFY: WELL YIELD (gpm):									
	WELL TES	T TEST	RESULTS - ATT	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUI ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER T	DING DISCHARGE	METHOD,					
TEST; RIG SUPERVISION		STAR	1 TIME, END II	ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER 1	HE TESTING PERIO	JD.					
SV IS	MISCELLANEOUS INFORMATION:										
OPE	4X4X60 F	IIGH RISE									
S S	2X2 PAD	MTV NIM									
.; 2	LEA COUNTY NM										
resi	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:										
vi	,										
				TO THE PERT OF THE ON THE WHOLE EACH AND DELIVER	THE FOREGOING I	S A TRILE AND					
国	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER										
SIGNATURE	AND THE	PERMIT HO	LDER WITHIN	20 DAYS AFTER COMPLETION OF WELL DRILLING:							
NA.			2	. 7	1-1-						
6. SIC	2/-	20.	5 year	Elware Deyral	9/30/15						
L		SIGNAT	URE ON DRILLI	ER / PRINT SIGNEE NAME	DATE						
EO	R OSE INTER	NAI IISE		WR-20 WELL	RECORD & LOG (V	ersion 06/08/2012)					
	E NUMBER		3218	POD NUMBER (TRN NUMBER	57050	⁷ つ					
	CATION	m		155,35E,34,213		PAGE 2 OF 2					
1		1 4	* /	10,		 					

Appendix C

Well Survey Report November 2022







COORDINATE TABLE

COORDINATES VALUES SHOWN ARE RELATIVE TO THE NORTH AMERICAN DATUM 1983, "NEW MEXICO EAST ZONE". ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM 1988

WELL	COORDINATES	ELEVATIONS
MW #1	718754.5 N 826775.5 E	NATURAL GROUND - 3973.05' TOP OF CONCRETE - 3973.15' TOP OF PVC - 3975.52'
MW #2	718624.4 N 827284.4 E	NATURAL GROUND - 3972.55' TOP OF CONCRETE - 3972.52' TOP OF PVC - 3974.76'
MW #3	718751.1 N 827254.9 E	NATURAL GROUND - 3973.86' TOP OF CONCRETE - 3973.92' TOP OF PVC - 3976.67'
MW #4	718462.6 N 827262.2 E	NATURAL GROUND - 3971.80' TOP OF CONCRETE - 3971.91' TOP OF PVC - 3974.52'
MW #5	718446.9 N 826735.6 E	NATURAL GROUND - 3971.78' TOP OF CONCRETE - 3971.82' TOP OF PVC - 3974.43'
MW #6	718672.3 N 827195.6 E	NATURAL GROUND - 3972.74' TOP OF CONCRETE - 3973.13' TOP OF PVC - 3976.17'
MW #7	718301.7 N 827766.4 E	NATURAL GROUND - 3969.65' TOP OF CONCRETE -3969.83' TOP OF PVC DEEP -3969.41' TOP OF PVC MEDIUM -3969.43' TOP OF PVC SHALLOW -3969.45'
MW #8	718728.7 N 827755.9 E	NATURAL GROUND - 3969.75' TOP OF CONCRETE - 3970.03' TOP OF PVC DEEP - 3969.29' TOP OF PVC MEDIUM -3969.30' TOP OF PVC SHALLOW -3969.47'
MW #9	718914.0 N 826662.6 E	NATURAL GROUND - 3972.15' TOP OF CONCRETE - 3972.44' TOP OF PVC DEEP - 3971.82' TOP OF PVC MEDIUM -3971.85' TOP OF PVC SHALLOW -3971.80'

SURVEYOR'S CERTIFICATE:

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR
No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE
ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED
WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION;
THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY
MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW
MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY
KNOWLEDGE AND BELIEF.

<u>Konald (Eidam</u> DATE: 1/18/2022



PROVIDING SURVEYING SERVICES

SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO HOBBS, N.M. 88240 (575) 393-3117 www.jwsc.biz TBPLS# 10021000

© V:\2022\22110410 MONITOR WELLS\DRAFTING



LEGEND:

- DENOTES MONITOR WELL

- DENOTES BENCHMARK 5/8" STL. ROD W/2" A.C.

DIAMONDBACK ENERGY

MONITOR WELL LOCATIONS IN NW/4 SW/4 SECTION 34, TOWNSHIP 15 SOUTH, RANGE 35 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

ľ	Survey Date:		11/16/2022	CAD Date:		11/17/2022	Dra	awn By:	ACK
人	W.O. No.: 22110410 Rev:		Rev:	0	Rel. \	<i>N</i> .O.:		Sheet 1	of 1

Appendix D

November 2021 and March 2022 Laboratory Reports





Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

October 13, 2021

Wayne Price

Richard Olsone Hinkle Shanor Law Firm

P.O. Box 10

Roswell, NM 88202

TEL: (575) 622-6510

FAX

RE: Energy Resources Corp West Lovington Strawn Unit 8 Unit L OrderNo.: 2109D96

Sec 34 T 15S R 34E Lea Co. NM

Dear Wayne Price:

Hall Environmental Analysis Laboratory received 28 sample(s) on 9/23/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (0.0'-7.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/19/2021 1:32:00 PM

Lab ID: 2109D96-001

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	VP
Chloride	ND	60	mg/Kg	20	9/29/2021 12:08:08 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst:	SB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/28/2021 9:44:54 PM	62841
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/28/2021 9:44:54 PM	62841
Surr: DNOP	74.4	70-130	%Rec	1	9/28/2021 9:44:54 PM	62841
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/29/2021 12:23:32 AM	62835
Surr: BFB	108	70-130	%Rec	1	9/29/2021 12:23:32 AM	62835
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	9/29/2021 12:23:32 AM	62835
Toluene	ND	0.049	mg/Kg	1	9/29/2021 12:23:32 AM	62835
Ethylbenzene	ND	0.049	mg/Kg	1	9/29/2021 12:23:32 AM	62835
Xylenes, Total	ND	0.097	mg/Kg	1	9/29/2021 12:23:32 AM	62835
Surr: 4-Bromofluorobenzene	94.2	70-130	%Rec	1	9/29/2021 12:23:32 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 34

Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (7.5' - 12.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/19/2021 2:02:00 PM

Lab ID: 2109D96-002

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 12:20:32 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/28/2021 10:09:09 PM	62841
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/28/2021 10:09:09 PM	62841
Surr: DNOP	72.5	70-130	%Rec	1	9/28/2021 10:09:09 PM	62841
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/29/2021 12:47:12 AM	62835
Surr: BFB	109	70-130	%Rec	1	9/29/2021 12:47:12 AM	62835
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	9/29/2021 12:47:12 AM	62835
Toluene	ND	0.049	mg/Kg	1	9/29/2021 12:47:12 AM	62835
Ethylbenzene	ND	0.049	mg/Kg	1	9/29/2021 12:47:12 AM	62835
Xylenes, Total	ND	0.098	mg/Kg	1	9/29/2021 12:47:12 AM	62835
Surr: 4-Bromofluorobenzene	95.4	70-130	%Rec	1	9/29/2021 12:47:12 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 34

Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (12.5' - 17.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/17/2021 2:30:00 PM

Lab ID: 2109D96-003

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 12:32:57 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/28/2021 10:33:34 PM	62841
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/28/2021 10:33:34 PM	62841
Surr: DNOP	70.9	70-130	%Rec	1	9/28/2021 10:33:34 PM	62841
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/29/2021 1:10:44 AM	62835
Surr: BFB	105	70-130	%Rec	1	9/29/2021 1:10:44 AM	62835
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	9/29/2021 1:10:44 AM	62835
Toluene	ND	0.049	mg/Kg	1	9/29/2021 1:10:44 AM	62835
Ethylbenzene	ND	0.049	mg/Kg	1	9/29/2021 1:10:44 AM	62835
Xylenes, Total	ND	0.099	mg/Kg	1	9/29/2021 1:10:44 AM	62835
Surr: 4-Bromofluorobenzene	91.2	70-130	%Rec	1	9/29/2021 1:10:44 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 34

Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-7 (17.5' - 20.0')Project:Energy Resources Corp West LovingtonCollection Date: 9/19/2021 3:25:00 PMLab ID:2109D96-004Matrix: SOILReceived Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	ND	60		mg/Kg	20	9/29/2021 12:45:22 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/28/2021 10:57:51 PM	62841
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/28/2021 10:57:51 PM	62841
Surr: DNOP	60.1	70-130	S	%Rec	1	9/28/2021 10:57:51 PM	62841
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/29/2021 1:34:18 AM	62835
Surr: BFB	106	70-130		%Rec	1	9/29/2021 1:34:18 AM	62835
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.025		mg/Kg	1	9/29/2021 1:34:18 AM	62835
Toluene	ND	0.050		mg/Kg	1	9/29/2021 1:34:18 AM	62835
Ethylbenzene	ND	0.050		mg/Kg	1	9/29/2021 1:34:18 AM	62835
Xylenes, Total	ND	0.099		mg/Kg	1	9/29/2021 1:34:18 AM	62835
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	9/29/2021 1:34:18 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 34

Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-7 (20.0' - 25.0')Project:Energy Resources Corp West LovingtonCollection Date: 9/19/2021 4:30:00 PMLab ID:2109D96-005Matrix: SOILReceived Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	ND	60		mg/Kg	20	9/29/2021 1:22:37 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst	: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/28/2021 11:22:07 PM	62841
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2021 11:22:07 PM	62841
Surr: DNOP	63.8	70-130	S	%Rec	1	9/28/2021 11:22:07 PM	62841
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2021 1:57:46 AM	62835
Surr: BFB	107	70-130		%Rec	1	9/29/2021 1:57:46 AM	62835
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024		mg/Kg	1	9/29/2021 1:57:46 AM	62835
Toluene	ND	0.048		mg/Kg	1	9/29/2021 1:57:46 AM	62835
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2021 1:57:46 AM	62835
Xylenes, Total	ND	0.096		mg/Kg	1	9/29/2021 1:57:46 AM	62835
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	9/29/2021 1:57:46 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-7 (25.0' - 30.0')Project:Energy Resources Corp West LovingtonCollection Date: 9/19/2021 4:40:00 PMLab ID:2109D96-006Matrix: SOILReceived Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	ND	60		mg/Kg	20	9/29/2021 1:35:02 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/28/2021 11:46:19 PM	62841
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/28/2021 11:46:19 PM	62841
Surr: DNOP	57.9	70-130	S	%Rec	1	9/28/2021 11:46:19 PM	62841
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/29/2021 2:21:20 AM	62835
Surr: BFB	109	70-130		%Rec	1	9/29/2021 2:21:20 AM	62835
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.024		mg/Kg	1	9/29/2021 2:21:20 AM	62835
Toluene	ND	0.048		mg/Kg	1	9/29/2021 2:21:20 AM	62835
Ethylbenzene	ND	0.048		mg/Kg	1	9/29/2021 2:21:20 AM	62835
Xylenes, Total	ND	0.096		mg/Kg	1	9/29/2021 2:21:20 AM	62835
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	9/29/2021 2:21:20 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (37.5' - 45.0')

Project: Energy Resources Corp West Lovington

Collection Date: 9/20/2021 7:42:00 AM

Lab ID: 2109D96-008

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 1:47:27 PM	A 62898

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm **Client Sample ID:** MW-7 (45.0' - 50.0') **Energy Resources Corp West Lovington** Collection Date: 9/20/2021 9:59:00 AM Lab ID: 2109D96-009 Matrix: SOIL Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 1:59:52 PM	A 62898

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Limit RL

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-7 (50.0' - 52.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/20/2021 8:02:00 AMLab ID:2109D96-010Matrix: SOILReceived Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 2:12:17 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/29/2021 12:10:41 AM	62841
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/29/2021 12:10:41 AM	62841
Surr: DNOP	73.6	70-130	%Rec	1	9/29/2021 12:10:41 AM	62841
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/29/2021 4:18:54 AM	62835
Surr: BFB	105	70-130	%Rec	1	9/29/2021 4:18:54 AM	62835
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	9/29/2021 4:18:54 AM	62835
Toluene	ND	0.049	mg/Kg	1	9/29/2021 4:18:54 AM	62835
Ethylbenzene	ND	0.049	mg/Kg	1	9/29/2021 4:18:54 AM	62835
Xylenes, Total	ND	0.098	mg/Kg	1	9/29/2021 4:18:54 AM	62835
Surr: 4-Bromofluorobenzene	90.3	70-130	%Rec	1	9/29/2021 4:18:54 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-7 (52.5' - 55.0')Project:Energy Resources Corp West LovingtonCollection Date: 9/20/2021 9:05:00 AMLab ID:2109D96-011Matrix: SOILReceived Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 2:24:41 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	9/29/2021 12:34:51 AM	62841
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	9/29/2021 12:34:51 AM	62841
Surr: DNOP	73.6	70-130	%Rec	1	9/29/2021 12:34:51 AM	62841
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/29/2021 4:42:26 AM	62835
Surr: BFB	107	70-130	%Rec	1	9/29/2021 4:42:26 AM	62835
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.025	mg/Kg	1	9/29/2021 4:42:26 AM	62835
Toluene	ND	0.050	mg/Kg	1	9/29/2021 4:42:26 AM	62835
Ethylbenzene	ND	0.050	mg/Kg	1	9/29/2021 4:42:26 AM	62835
Xylenes, Total	ND	0.10	mg/Kg	1	9/29/2021 4:42:26 AM	62835
Surr: 4-Bromofluorobenzene	93.2	70-130	%Rec	1	9/29/2021 4:42:26 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (55.0' - 65.0')

Project: Energy Resources Corp West Lovington

Lab ID: 2109D96-012

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 2:37:05 PM	A 62898

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
Client Sample ID: MW-7 (65.0' - 75.0')

Project: Energy Resources Corp West Lovington
Collection Date: 9/20/2021 10:50:00 AM

Lab ID: 2109D96-013
Matrix: SOIL
Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 2:49:30 PM	A 62898

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm **Client Sample ID:** MW-7 (75.0' - 85.0') **Energy Resources Corp West Lovington Collection Date:** 9/20/2021 11:13:00 AM Lab ID: 2109D96-014 Matrix: SOIL Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 3:01:55 PM	1 62898

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Limit RL

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (85.0' - 87.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/20/2021 11:55:00 AM

Lab ID: 2109D96-015

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 3:14:20 PM	1 62898

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (87.5' - 97.5')

Project: Energy Resources Corp West Lovington

Lab ID: 2109D96-016

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 3:51:33 PM	A 62898

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-7 (97.5' - 107.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/20/2021 2:50:00 PMLab ID:2109D96-017Matrix: SOILReceived Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 4:28:47 PM	62898
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	8.3	mg/Kg	1	9/29/2021 12:59:08 AM	62841
Motor Oil Range Organics (MRO)	ND	41	mg/Kg	1	9/29/2021 12:59:08 AM	62841
Surr: DNOP	78.3	70-130	%Rec	1	9/29/2021 12:59:08 AM	62841
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/29/2021 5:05:58 AM	62835
Surr: BFB	108	70-130	%Rec	1	9/29/2021 5:05:58 AM	62835
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	9/29/2021 5:05:58 AM	62835
Toluene	ND	0.049	mg/Kg	1	9/29/2021 5:05:58 AM	62835
Ethylbenzene	ND	0.049	mg/Kg	1	9/29/2021 5:05:58 AM	62835
Xylenes, Total	ND	0.098	mg/Kg	1	9/29/2021 5:05:58 AM	62835
Surr: 4-Bromofluorobenzene	94.4	70-130	%Rec	1	9/29/2021 5:05:58 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109D96-018
 Matrix: SOIL
 Client Sample ID: MW-7 (107.5' - 117.5')
 Collection Date: 9/20/2021 3:45:00 PM
 Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 5:30:51 PN	A 62900

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109D96-019
 Matrix: SOIL
 Client Sample ID: MW-7 (117.5' - 127.5')
 Collection Date: 9/20/2021 4:36:00 PM
 Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	59	mg/Kg	20	9/29/2021 5:43:16 PM	M 62900

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (127.5' - 137.5')

Project: Energy Resources Corp West Lovington

Lab ID: 2109D96-020

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 6:20:30 PM	A 62900

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (137.5' - 147.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/21/2021 8:38:00 AM

Lab ID: 2109D96-021

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 6:32:55 PM	A 62900

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109D96-022
 Matrix: SOIL
 Client Sample ID: MW-7 (148.5' - 157.5')
 Collection Date: 9/21/2021 1:55:00 PM
 Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 6:45:20 PM	62900
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	8.1	mg/Kg	1	9/29/2021 1:23:22 AM	62841
Motor Oil Range Organics (MRO)	ND	40	mg/Kg	1	9/29/2021 1:23:22 AM	62841
Surr: DNOP	80.4	70-130	%Rec	1	9/29/2021 1:23:22 AM	62841
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/29/2021 9:09:01 AM	62835
Surr: BFB	105	70-130	%Rec	1	9/29/2021 9:09:01 AM	62835
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	9/29/2021 9:09:01 AM	62835
Toluene	ND	0.049	mg/Kg	1	9/29/2021 9:09:01 AM	62835
Ethylbenzene	ND	0.049	mg/Kg	1	9/29/2021 9:09:01 AM	62835
Xylenes, Total	ND	0.097	mg/Kg	1	9/29/2021 9:09:01 AM	62835
Surr: 4-Bromofluorobenzene	91.2	70-130	%Rec	1	9/29/2021 9:09:01 AM	62835

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (147.5' - 148.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/21/2021 1:57:00 PM

Lab ID: 2109D96-023

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	59	mg/Kg	20	9/29/2021 6:57:45 PM	62900
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/29/2021 2:36:19 AM	62842
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/29/2021 2:36:19 AM	62842
Surr: DNOP	79.1	70-130	%Rec	1	9/29/2021 2:36:19 AM	62842
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/28/2021 9:51:00 PM	62836
Surr: BFB	96.6	70-130	%Rec	1	9/28/2021 9:51:00 PM	62836
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.024	mg/Kg	1	9/28/2021 9:51:00 PM	62836
Toluene	ND	0.049	mg/Kg	1	9/28/2021 9:51:00 PM	62836
Ethylbenzene	ND	0.049	mg/Kg	1	9/28/2021 9:51:00 PM	62836
Xylenes, Total	ND	0.098	mg/Kg	1	9/28/2021 9:51:00 PM	62836
Surr: 4-Bromofluorobenzene	79.6	70-130	%Rec	1	9/28/2021 9:51:00 PM	62836

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (157.5' - 167.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/22/2021 8:00:00 AM

Lab ID: 2109D96-024

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	61	mg/Kg	20	9/29/2021 7:10:10 PM	A 62900

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (167.5' - 177.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/22/2021 8:40:00 AM

Lab ID: 2109D96-025

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 7:22:34 PM	Л 62900

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109D96-026
 Matrix: SOIL
 Client Sample ID: MW-7 (177.5' - 187.5')
 Collection Date: 9/22/2021 9:30:00 AM
 Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 7:34:58 PM	A 62900

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-7 (187.5' - 197.5')

Project: Energy Resources Corp West Lovington

Lab ID: 2109D96-027

Matrix: SOIL

Received Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	9/29/2021 7:47:23 PM	62900
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	9/29/2021 3:49:04 AM	62842
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/29/2021 3:49:04 AM	62842
Surr: DNOP	87.6	70-130	%Rec	1	9/29/2021 3:49:04 AM	62842
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/28/2021 10:50:00 PM	62836
Surr: BFB	90.5	70-130	%Rec	1	9/28/2021 10:50:00 PM	62836
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.024	mg/Kg	1	9/28/2021 10:50:00 PM	62836
Toluene	ND	0.048	mg/Kg	1	9/28/2021 10:50:00 PM	62836
Ethylbenzene	ND	0.048	mg/Kg	1	9/28/2021 10:50:00 PM	62836
Xylenes, Total	ND	0.096	mg/Kg	1	9/28/2021 10:50:00 PM	62836
Surr: 4-Bromofluorobenzene	78.2	70-130	%Rec	1	9/28/2021 10:50:00 PM	62836

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 10/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm Client Sample ID: Field Blank

Project:Energy Resources Corp West LovingtonCollection Date: 9/22/2021 2:30:00 PMLab ID:2109D96-028Matrix: AQUEOUSReceived Date: 9/23/2021 9:10:00 AM

Analyses	Result	PQL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: RAA
Benzene	ND	1.0	μg/L	1	9/25/2021 9:04:00 PM	BW8160
Toluene	ND	1.0	μg/L	1	9/25/2021 9:04:00 PM	BW8160
Ethylbenzene	ND	1.0	μg/L	1	9/25/2021 9:04:00 PM	BW8160
Xylenes, Total	ND	2.0	μg/L	1	9/25/2021 9:04:00 PM	BW8160
Surr: 4-Bromofluorobenzene	85.2	70-130	%Rec	1	9/25/2021 9:04:00 PM	BW8160

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2109D96**

13-Oct-21

Client: Richard Olsone Hinkle Shanor Law Firm

Project: Energy Resources Corp West Lovington Strawn

Sample ID: MB-62898 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 62898 RunNo: 81677

Prep Date: 9/29/2021 Analysis Date: 9/29/2021 SeqNo: 2886749 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-62898 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 62898 RunNo: 81677

Prep Date: 9/29/2021 Analysis Date: 9/29/2021 SeqNo: 2886750 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.5 90 110

Sample ID: MB-62900 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 62900 RunNo: 81677

Prep Date: 9/29/2021 Analysis Date: 9/29/2021 SeqNo: 2886779 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-62900 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 62900 RunNo: 81677

Prep Date: 9/29/2021 Analysis Date: 9/29/2021 SeqNo: 2886780 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 96.4 90 110

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

8 % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2109D96**

13-Oct-21

Client: Richard Olsone Hinkle Shanor Law Firm

Project: Energy Resources Corp West Lovington Strawn

Sample ID: MB-62842 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 62842 RunNo: 81656 Prep Date: 9/27/2021 Analysis Date: 9/29/2021 SeqNo: 2886339 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 7.6 10.00 76.4 70 130 Sample ID: 2109D96-023AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: MW-7 (147.5' - 148.5' Batch ID: 62842 RunNo: 81656 Prep Date: 9/27/2021 Analysis Date: 9/29/2021 SeqNo: 2888222 Units: mg/Kg **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual Diesel Range Organics (DRO) 47 9.3 n 39.3 46.43 101 155 Surr: DNOP 3.3 4.643 71.9 130

Sample ID: 2109D96-023AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: MW-7 (147.5' - 148.5' Batch ID: 62842 RunNo: 81656 Prep Date: 9/27/2021 Analysis Date: 9/29/2021 SeqNo: 2888223 Units: mg/Kg **PQL** %REC %RPD **RPDLimit** Analyte Result SPK value SPK Ref Val LowLimit HighLimit Qual Diesel Range Organics (DRO) 49 9.9 49.41 100 39.3 155 4.92 23.4 Surr: DNOP 3.5 4.941 71.8 70 130 0 n

Sample ID: LCS-62841 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 62841 RunNo: 81656 Prep Date: 9/27/2021 Analysis Date: 9/28/2021 SeqNo: 2888240 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result **PQL** HighLimit Qual Diesel Range Organics (DRO) 49 10 50.00 98.3 68.9 135 Surr: DNOP 4.2 5.000 84.6 70 130

Sample ID: MB-62841 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 62841 RunNo: 81656 Prep Date: 9/27/2021 Analysis Date: 9/28/2021 SeqNo: 2888241 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 9.0 10.00 89.8 70 130

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2109D96**

13-Oct-21

Client: Richard Olsone Hinkle Shanor Law Firm
Project: Energy Resources Corp West Lovington Strawn

Sample ID: mb-62835 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: PRS Batch ID: 62835 RunNo: 81634 Prep Date: 9/26/2021 Analysis Date: 9/29/2021 SeqNo: 2885093 Units: mq/Kq **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 1100 1000 110 70 130 Sample ID: Ics-62835 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 62835 RunNo: 81634 Prep Date: 9/26/2021 Analysis Date: 9/29/2021 SeqNo: 2885094 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 5.0 25.00 78.6 Surr: BFB 1200 1000 120 70 130 Sample ID: Ics-62836 TestCode: EPA Method 8015D: Gasoline Range SampType: LCS Client ID: LCSS Batch ID: 62836 RunNo: 81641 Prep Date: 9/26/2021 Analysis Date: 9/28/2021 SeqNo: 2885614 Units: mq/Kq Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 27 5.0 25.00 0 107 78.6 131 Surr: BFB 1100 1000 106 70 130 Sample ID: mb-62836 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: PBS Batch ID: 62836 RunNo: 81641 Prep Date: 9/26/2021 Analysis Date: 9/28/2021 SegNo: 2885615 Units: mg/Kg SPK value SPK Ref Val Result **PQL** %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0

Sample ID: 2109d96-023ams	SampT	npType: MS TestCode: EPA Method					l 8015D: Gasoline Range				
Client ID: MW-7 (147.5' - 14	8.5' Batch	ID: 62	836	R	RunNo: 8	1641					
Prep Date: 9/26/2021	Analysis D	ate: 9/	28/2021	SeqNo: 2885617			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	27	4.9	24.73	0	110	61.3	114				
Surr: BFB	1000		989.1		104	70	130				

Sample ID: 2109d96-023amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

1000

Client ID: MW-7 (147.5' - 148.5' Batch ID: 62836 RunNo: 81641

880

Prep Date: 9/26/2021 Analysis Date: 9/28/2021 SeqNo: 2885618 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Qualifiers:

Surr: BFB

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

87.6

70

130

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2109D96**

13-Oct-21

Client: Richard Olsone Hinkle Shanor Law Firm

Project: Energy Resources Corp West Lovington Strawn

Sample ID: 2109d96-023amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: MW-7 (147.5' - 148.5' Batch ID: 62836 RunNo: 81641

Prep Date: 9/26/2021 Analysis Date: 9/28/2021 SeqNo: 2885618 Units: mg/Kg

							_	_		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.63	0	112	61.3	114	1.80	20	
Surr: BFB	1100		985.2		108	70	130	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2109D96**

13-Oct-21

Client: Richard Olsone Hinkle Shanor Law Firm
Project: Energy Resources Corp West Lovington Strawn

Sample ID: mb-62835	Sampl	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batcl	n ID: 62 8	835	F	RunNo: 8	1634				
Prep Date: 9/26/2021	Analysis D	Date: 9/	29/2021	5	SeqNo: 2	885143	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.0	70	130			

Sample ID: LCS-62835	Sampl	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batcl	h ID: 628	835	F	RunNo: 8	1634				
Prep Date: 9/26/2021	Analysis D	Date: 9/ 2	29/2021	8	SeqNo: 2	885144	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.0	80	120			
Toluene	0.99	0.050	1.000	0	98.9	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.1	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.9	70	130			

Sample ID: Ics-62836	SampT	ype: LC	S	Tes	tCode: El	PA Method	thod 8021B: Volatiles					
Client ID: LCSS	Batcl	n ID: 62 8	836	F	RunNo: 8	1641						
Prep Date: 9/26/2021	Analysis D	Date: 9/	28/2021	5	SeqNo: 2	885656	Units: mg/K	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.94	0.025	1.000	0	94.3	80	120					
Toluene	0.93	0.050	1.000	0	92.6	80	120					
Ethylbenzene	0.93	0.050	1.000	0	93.3	80	120					
Xylenes, Total	2.8	0.10	3.000	0	93.7	80	120					
Surr: 4-Bromofluorobenzene	0.81		1.000		81.2	70	130					

Sample ID: mb-62836	SampT	уре: МЕ	MBLK TestCode: EPA Method				od 8021B: Volatiles						
Client ID: PBS	Batch	n ID: 62	836	R	RunNo: 8	1641							
Prep Date: 9/26/2021	Analysis D	ate: 9/	28/2021	S	SeqNo: 2	885657	Units: mg/K	g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	ND	0.025											
Toluene	ND	0.050											
Ethylbenzene	ND	0.050											
Xylenes, Total	ND	0.10											
Surr: 4-Bromofluorobenzene	0.76		1.000		76.0	70	130						

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2109D96**

13-Oct-21

Client: Richard Olsone Hinkle Shanor Law Firm

Project: Energy Resources Corp West Lovington Strawn

Sample ID: 2109d96-027am	s SampT	ype: MS	i	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: MW-7 (187.5' - 1	97.5' Batcl	n ID: 62 8	336	F	RunNo: 8	1641				
Prep Date: 9/26/2021	Analysis D	oate: 9/2	28/2021	5	SeqNo: 2	885660	Units: mg/K	.g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	0.9804	0	90.2	80	120			
Toluene	0.89	0.049	0.9804	0	91.2	80	120			
Ethylbenzene	0.90	0.049	0.9804	0	92.2	80	120			
Xylenes, Total	2.7	0.098	2.941	0	92.5	80	120			
Surr: 4-Bromofluorobenzene	0.76		0.9804		77.6	70	130			

Sample ID: 2109d96-027am	sd SampT	SampType: MSD TestCode: EPA Metho					8021B: Volat	iles		
Client ID: MW-7 (187.5' - 1	197.5' Batch	1D: 62	836	F	RunNo: 8	1641				
Prep Date: 9/26/2021	Analysis D	ate: 9/	28/2021	5	SeqNo: 2	885661	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	0.9891	0	88.3	80	120	1.22	20	
Toluene	0.86	0.049	0.9891	0	87.2	80	120	3.66	20	
Ethylbenzene	0.87	0.049	0.9891	0	88.1	80	120	3.60	20	
Xylenes, Total	2.6	0.099	2.967	0	88.3	80	120	3.68	20	
Surr: 4-Bromofluorobenzene	0.80		0.9891		80.6	70	130	0	0	

Qualifiers:

Page 33 of 34

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **2109D96**

13-Oct-21

Client: Richard Olsone Hinkle Shanor Law Firm

Project: Energy Resources Corp West Lovington Strawn

Sample ID: 100ng BTEX Ics	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSW	Batch	n ID: BV	V81606	F	RunNo: 8	1606				
Prep Date:	Analysis D	oate: 9/	25/2021	9	SeqNo: 28	883874	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.0	80	120			
Toluene	19	1.0	20.00	0	95.1	80	120			
Ethylbenzene	20	1.0	20.00	0	98.3	80	120			
Xylenes, Total	59	2.0	60.00	0	99.2	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		89.2	70	130			

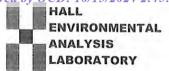
Sample ID: mb	SampT	ype: ME	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBW	Batch	ID: BV	V81606	R	RunNo: 8	1606				
Prep Date:	Analysis D	ate: 9/	25/2021	S	SeqNo: 2	883875	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		89.4	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 34 of 34



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Richard Olsone Hinkle Shanor Law Firm	Work Order Number	r: 2109	D96		RcptN	o: 1
Received By: Tracy Casarrubias	9/23/2021 9:10:00 AM	1				
Completed By: Cheyenne Cason	9/24/2021 9:03:37 AM	1		Charl		
Reviewed By: TTML	9/24/21			2		
Chain of Custody						
Is Chain of Custody complete?		Yes	V	No 🗌	Not Present	
2. How was the sample delivered?						
Log In						
3. Was an attempt made to cool the sam	ples?	Yes	V	No 🗌	NA 🗌	
4. Were all samples received at a temper	ature of >0° C to 6.0°C	Yes	V	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?		Yes	~	No 🗌		
6. Sufficient sample volume for indicated	test(s)?	Yes	V	No 🗌		
7. Are samples (except VOA and ONG) pr	roperly preserved?	Yes	V	No 🗌		
8. Was preservative added to bottles?		Yes		No 🗸	NA 🗌	
9. Received at least 1 vial with headspace	<1/4" for AQ VOA?	Yes	V	No 🗌	NA 🗆	
0. Were any sample containers received	broken?	Yes		No 🗸		
Does paperwork match bottle labels?		Yes	V	No 🗆	# of preserved bottles checked for pH:	
(Note discrepancies on chain of custod	y)	,,,,		127	(<2.0	or >12 unless noted)
Are matrices correctly identified on Cha	in of Custody?	Yes	✓	No 🗌	Adjusted?	
Is it clear what analyses were requested	d?		V	No 🗌		1 -1 - 115
Were all holding times able to be met?(If no, notify customer for authorization.)	Yes	V	No 🗌	Checked by:	JA 9/24/21
pecial Handling (if applicable)						
5. Was client notified of all discrepancies	with this order?	Yes		No 🗌	NA 🗸	
Person Notified:	Date:	_	_			
By Whom:	Via:	eMa	il 🖂	Phone Fax	In Person	
Regarding:						
Client Instructions:						
6. Additional remarks:						
17. Cooler Information Cooler No Temp °C Condition 1 5.3 Good	Seal Intact Seal No S	Seal Da	ite	Signed By		

			NOR UP	Turn-Around		1				7.7			E	NV	/IF	20	NI		NT	
ATT	W. A	chara	Colson, Esa. Box 10	Project Name hest Lov Unit L	Energen Sec. 34, T.	Resources Corp rown Unst #8 155.R34E, Dir of Countwater	6	490	11 H	1	www	.hal	llenv	iron	ment	tal.co				
			88202-0010 2.6510	Project #: De	Lineation OCO Case -	+ COUNTWATER				5-34	5-39	-	-	_	505- Req	_	-410	7		13/40/24
@mail o QA/QC I	r Fax#: ; Package: idard	rolson lukyne Haob	Chinklelaw firm, Con Price Q, Cong ba Lidmonbackenergy, D Level 4 (Full Validation)	Project Mana Cory Wa	ager: Sync Pri	ice	's (8021)	TPH (Gas only)	Gas/Diesel)					,PO ₄ ,SO ₄)	2 PCB's					2.43.3 / ED
Accredi	AP	□ Othe	er	On Ice:	Yes /	CMBarahill, Pt No 2 to 1 = 5.3	E + TMB	E + TPH	80158 (0		1 504.1)	r PAH)	als	NO3,NO2	les / 8082		(OA)			Y or N)
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type		BIEX+ MTBE	BTEX + MTBE	TPH Method 8015B	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,CDNO3,NO2,	8081 Pesticides	8260B (VOA)	8270 (Semi-VOA)			Air Bubbles (
9/20/21	1050	Soic	MW-7 (650'-750')	14026 tax	None	013	亥	- 1	X					X						
19/20/21	1/13		MW-7(750-85,0			014								X						
19/20/21	1155		MW-7 (85.0-87.5)			015	1							X						
19/20/21	1418		MW-7 (875'-97.5)			016								X						
19/20/21	1450		MW-7 (97.5'-107.5)			017	X		X					X						
9/20/21	1545		MW7 (107.5-117.5)			018								X						
9/20/21	1636		MN=7 (11751-127.5)			019								X						
09/20/21	1715		MW-7 (127.5'-137.5')			010							_	X					_	
19/21/21	0838		MW-7(137.5'-147,5	2		021	1			-	4		_	X		Ш		\perp	+	
19/21/21	1355		MW-7 (1485-157.5			022	X		X	-	4			X				-		
09/7/7/	1357	///	MW-7 (147.5-148.5		2/	023	X	-	4	-	-	-	_	Ż				+	-	
04/23/2/ Date: 79/23/2/ Date:	0800 Time: 144 Time:	Relinquish	the .	Received by:																1615

Roswell, NM 88202-0010 Phone #: 575, 622, 6510	Turn-Around Time: Standard Rush Project Name: Energy Resources Coup Nest Lovington Strawn Unit #8 Unit L, Sec. 34 T. 155 R. 34, E NR Project #: Delineation of Croundantes OCD Clase #1 RP-2457	Tel. 505-345-3975 Fax 505-345-4107 Analysis Request
email or Fax#: Polson a hinkle law firm, congression of the law firm, congression of the law firm, congression of the law firm, congression of the law firm, congression of the law form, congression of the law firm, cong	Sampler: Landerson PHD / CM Barnh: 11 / PHO Ice: Yes No Sample Temperature: 5.2+0.1 = 5.3 Container Type and # Preservative Type 1/4016 None 025	STEX + MTBE + TMB's(8021) BTEX + MTBE + TPH (Gas only) TPH Method 418.1) EDB (Method 418.1) EDB (Method 504.1) B310 (PNA or PAH) RCRA 8 Metals Anions (F@NO ₃ ,NO ₂ ,PO ₄ ,SO ₄) 8260B (VOA) 8270 (Semi-VOA) Air Bubbles (Y or N) w. J. C.C. F. 7
09/24/21/1430 to Field Blanc	3440MC Her O28	Remarks: ** Pleuse retain So. L. Samples in Case of additional Sampling requirements His Please Send Besuits To: ambinior agmail Any Westions? Please Call Common Strains Stra



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

September 29, 2021

Wayne Price Richard Olsone Hinkle Shanor Law Firm P.O. Box 10 Roswell, NM 88202

TEL: (575) 622-6510

FAX:

RE: Energy Resources Corp West Lovington Strown Unit 8 OrderNo.: 2109B07

Unit L Sec 34 T 15S R 34E

Dear Wayne Price:

Hall Environmental Analysis Laboratory received 28 sample(s) on 9/21/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-8 (0'-2.5')

CLIENT: Richard Olsone Hinkle Shanor Law Firm **Project:** Energy Resources Corp West Lovington

Collection Date: 9/15/2021 5:00:00 PM

Lab ID: 2109B07-001

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	9/23/2021
Surr: DNOP	76.8	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RANGE					Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/23/2021
Surr: BFB	87.1	70-130	%Rec	1	9/23/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/23/2021
Toluene	ND	0.049	mg/Kg	1	9/23/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/23/2021
Xylenes, Total	ND	0.098	mg/Kg	1	9/23/2021
Surr: 4-Bromofluorobenzene	75.6	70-130	%Rec	1	9/23/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

Matrix: SOIL

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

ND = Not Detected at the RL

MCL = EPA Maximum Contamination Level

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

RL = Reporting Limit: Laboratory Detection Level

P = Sample pH Not in Range Page 1 of 28

H = Holding times for preparation or analysis exceeded S = % Recovery outside of

S = % Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/29/2021

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (2.5' - 7.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/15/2021 5:10:00 PMLab ID:2109B07-002Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/23/2021
Surr: DNOP	82.9	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/23/2021
Surr: BFB	93.5	70-130	%Rec	1	9/23/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/23/2021
Toluene	ND	0.047	mg/Kg	1	9/23/2021
Ethylbenzene	ND	0.047	mg/Kg	1	9/23/2021
Xylenes, Total	ND	0.094	mg/Kg	1	9/23/2021
Surr: 4-Bromofluorobenzene	79.4	70-130	%Rec	1	9/23/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	61	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 2 of 28

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/29/2021

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (7.5' - 15.0')Project:Energy Resources Corp West LovingtonCollection Date: 9/15/2021 5:17:00 PMLab ID:2109B07-003Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/23/2021
Surr: DNOP	87.4	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/23/2021
Surr: BFB	90.8	70-130	%Rec	1	9/23/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/23/2021
Toluene	ND	0.048	mg/Kg	1	9/23/2021
Ethylbenzene	ND	0.048	mg/Kg	1	9/23/2021
Xylenes, Total	ND	0.095	mg/Kg	1	9/23/2021
Surr: 4-Bromofluorobenzene	78.4	70-130	%Rec	1	9/23/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 3 of 28

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/29/2021

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (15.0' - 17.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/15/2021 5:35:00 PMLab ID:2109B07-004Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/23/2021
Surr: DNOP	72.7	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/24/2021
Surr: BFB	89.4	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/24/2021
Toluene	ND	0.050	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.050	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.10	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	76.0	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 4 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-8 (17.5' - 23.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/16/2021 8:16:00 AM

Lab ID: 2109B07-005

Matrix: SOIL

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/23/2021
Surr: DNOP	78.9	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/24/2021
Surr: BFB	91.0	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/24/2021
Toluene	ND	0.049	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.097	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	77.2	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 5 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109B07-006
 Matrix: SOIL
 Client Sample ID: MW-8 (23.5' - 27.5')
 Collection Date: 9/16/2021 8:30:00 AM
 Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/23/2021
Surr: DNOP	84.4	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	9/24/2021
Surr: BFB	89.7	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.023	mg/Kg	1	9/24/2021
Toluene	ND	0.046	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.046	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.091	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	78.7	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 6 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (27.5' - 35.0')Project:Energy Resources Corp West LovingtonCollection Date: 9/16/2021 8:37:00 AMLab ID:2109B07-007Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/23/2021
Surr: DNOP	79.4	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/24/2021
Surr: BFB	93.8	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/24/2021
Toluene	ND	0.047	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.047	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.094	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	79.1	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 7 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-8 (35.0' - 40.0')

Project: Energy Resources Corp West Lovington

Collection Date: 9/16/2021 8:45:00 AM

Lab ID: 2109B07-008

Matrix: SOIL

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/23/2021
Surr: DNOP	80.6	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	9/24/2021
Surr: BFB	89.0	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.023	mg/Kg	1	9/24/2021
Toluene	ND	0.046	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.046	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.091	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	77.1	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 8 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109B07-009
 Matrix: SOIL
 Client Sample ID: MW-8 (40.0' - 47.5')
 Collection Date: 9/16/2021 9:50:00 AM
 Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 9 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-8 (47.5' - 51.0')

Project: Energy Resources Corp West Lovington

Lab ID: 2109B07-010

Matrix: SOIL

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/23/2021
Surr: DNOP	87.7	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RANGE					Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/24/2021
Surr: BFB	86.3	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/24/2021
Toluene	ND	0.050	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.050	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.099	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	74.8	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 10 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-8 (51.0' - 52.0')

Project: Energy Resources Corp West Lovington

Collection Date: 9/16/2021 10:15:00 AM

Lab ID: 2109B07-011

Matrix: SOIL

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/23/2021
Surr: DNOP	85.3	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/24/2021
Surr: BFB	88.6	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/24/2021
Toluene	ND	0.047	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.047	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.095	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	77.6	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 11 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-8 (52.0' - 57.5')

Project: Energy Resources Corp West Lovington

Lab ID: 2109B07-012

Matrix: SOIL

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	7.7	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	39	mg/Kg	1	9/23/2021
Surr: DNOP	86.8	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/24/2021
Surr: BFB	88.6	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/24/2021
Toluene	ND	0.048	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.048	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.096	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	77.0	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	59	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 12 of 28

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/29/2021

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (57.5' - 67.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/16/2021 2:14:00 PMLab ID:2109B07-013Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 13 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (67.5' - 77.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/16/2021 2:35:00 PMLab ID:2109B07-014Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 14 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109B07-015
 Matrix: SOIL
 Client Sample ID: MW-8 (80.0' - 87.5')
 Collection Date: 9/16/2021 2:56:00 PM
 Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 15 of 28

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/29/2021

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (87.5' - 97.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/16/2021 3:53:00 PMLab ID:2109B07-016Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 16 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109B07-017
 Matrix: SOIL
 Client Sample ID: MW-8 (97.5' - 107.5')
 Collection Date: 9/16/2021 4:22:00 PM
 Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/23/2021
Surr: DNOP	88.3	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/24/2021
Surr: BFB	89.1	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.023	mg/Kg	1	9/24/2021
Toluene	ND	0.047	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.047	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.094	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	77.9	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	61	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 17 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (107.5' - 117.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/16/2021 5:03:00 PMLab ID:2109B07-018Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 18 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (117.5' - 127.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/17/2021 7:58:00 AMLab ID:2109B07-019Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 19 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (127.5' - 137.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/17/2021 8:30:00 AMLab ID:2109B07-020Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 20 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (137.5' - 145.0')Project:Energy Resources Corp West LovingtonCollection Date: 9/17/2021 9:13:00 AMLab ID:2109B07-021Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 21 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109B07-022
 Matrix: SOIL
 Client Sample ID: MW-8 (145.0' - 155.0')
 Collection Date: 9/17/2021 9:54:00 AM
 Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	9/23/2021
Surr: DNOP	88.9	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/24/2021
Surr: BFB	92.1	70-130	%Rec	1	9/24/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/24/2021
Toluene	ND	0.047	mg/Kg	1	9/24/2021
Ethylbenzene	ND	0.047	mg/Kg	1	9/24/2021
Xylenes, Total	ND	0.095	mg/Kg	1	9/24/2021
Surr: 4-Bromofluorobenzene	80.0	70-130	%Rec	1	9/24/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 22 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-8 (155.0' - 157.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/17/2021 10:34:00 AM

Lab ID: 2109B07-023

Matrix: SOIL

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 23 of 28

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/29/2021

CLIENT:	Richard Olsone Hinkle Shanor La	ıw Firm	Client Sample ID: MW-8 (157.5' - 167.5')
Project:	Energy Resources Corp West Lov	ington	Collection Date: 9/17/2021 11:59:00 AM
Lab ID:	2109B07-024	Matrix: SOIL	Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 24 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-8 (167.5' - 177.5')

Project: Energy Resources Corp West Lovington

Collection Date: 9/17/2021 12:27:00 PM

Lab ID: 2109B07-025

Matrix: SOIL

Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/24/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 25 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-8 (177.5' - 187.5')Project:Energy Resources Corp West LovingtonCollection Date: 9/17/2021 1:25:00 PMLab ID:2109B07-026Matrix: SOILReceived Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/25/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 26 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109B07-027
 Matrix: SOIL
 Client Sample ID: MW-8 (187.5' - 197.5')
 Collection Date: 9/17/2021 2:55:00 PM
 Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/24/2021
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/24/2021
Surr: DNOP	96.2	70-130	%Rec	1	9/24/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/23/2021
Surr: BFB	102	70-130	%Rec	1	9/23/2021
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	9/23/2021
Toluene	ND	0.049	mg/Kg	1	9/23/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/23/2021
Xylenes, Total	ND	0.097	mg/Kg	1	9/23/2021
Surr: 4-Bromofluorobenzene	90.0	70-130	%Rec	1	9/23/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/25/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 27 of 28

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energy Resources Corp West Lovington
 Lab ID: 2109B07-028
 Matrix: AQUEOUS
 Client Sample ID: MW-8 Field Blank
 Collection Date: 9/20/2021 1:20:00 PM
 Received Date: 9/21/2021 9:23:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND		1.0	μg/L	1	9/25/2021
Toluene	ND		1.0	μg/L	1	9/25/2021
Ethylbenzene	ND		1.0	μg/L	1	9/25/2021
Xylenes, Total	ND		2.0	μg/L	1	9/25/2021
Surr: 4-Bromofluorobenzene	82.3		70-130	%Rec	1	9/25/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 28 of 28



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

	ard Olsone Hinkle nor Law Firm	Work Order	Number: 210	9B07			RcptNo: 1
Received By: Kas	sandra Payan	9/21/2021 9:23	3:00 AM		HE		
Completed By: Isa	iah Ortiz	9/21/2021 9:45	5:12 AM	12 AM I = C			
Reviewed By: 48	9 9/21	121					
Chain of Custody							
1. Is Chain of Custody	complete?		Yes	V	No	Not Prese	ent 🗌
2. How was the samp	le delivered?		<u>UP:</u>	3			
Log In							
3. Was an attempt ma	ide to cool the sample:	5?	Yes	•	No [NA 🗆
4. Were all samples re	ceived at a temperatu	re of >0° C to 6.0°C	Yes	~	No [ı .	NA 🗆
5. Sample(s) in proper	container(s)?		Yes	~	No [
6. Sufficient sample vo	lume for indicated test	(s)?	Yes	V	No [3	
7. Are samples (excep	t VOA and ONG) prope	erly preserved?	Yes	V	No [
8. Was preservative ac	ided to bottles?		Yes		No S	Z N	A 🗀
9. Received at least 1	vial with headspace <1	/4" for AQ VOA?	Yes		No [A 🗸
10. Were any sample c	ontainers received brol	ken?	Yes		No 5		
11 5	Care Marie Carlos A				3 A	# of preserve	ea ked
 Does paperwork ma (Note discrepancies 	tch bottle labels? on chain of custody)		Yes	V	No L	_ for pH:	(<2 or >12 unless noted)
12. Are matrices correct		of Custody?	Yes	~	No [Adjust	
3. Is it clear what analy			Yes	V	No [_ /	
14. Were all holding time			Yes	V	No [Checke	ed by: The 9.21-7
(If no, notify custome	er for authorization.)						,,
Special Handling (if applicable)						
15. Was client notified o	of all discrepancies with	n this order?	Yes		No [NA 🗸
Person Notifie	ed:		ate:	_			
By Whom:	1	V	′ia: eM	ail 🔲	Phone F	ax In Person	
Regarding:							man I
Client Instruct	ions:						
16. Additional remarks:							
17. Cooler Information	1						
		Seal Intact Seal N	lo Seal D	ate	Signed By	. 1	
1 5.9		ot Present			- gilou by		

												Par	ie	/	101	=_	*3)	Acc
Client:	hain	-of-Cu	non Up	Turn-Ard	ound Time:		E				ALI	LE	NV	/IF	80	NM	ENT	TAL	
11/	1/0,	Rich Box	110 U/SON, 1259,	Project Nest	Name: Energe Lovington S L Sec. 34,	Trawn Unit #8 T-155, R.34 E JM ST GROUND WAR		10	04.11	W	ww.h	allen	vironi	ment	tal.co			OR	Y
Ros	#: 57	NM 5.62	2.6510	0	CD Case #	1RP-2457				5-345	-397		Fax	505-	-345-	M 8710 4107	9	91 mg	713/4047
email o	r Fax#: Package:	rolson	chinkle lawfirm. Cong price Q. Cong b o diamind backene Level 4 (Full Validation)	Project N	Manager: Wayn	e Price	TMB's (80ZT)	(PH:8015D(GRO) GRO)	PCB's		N N N	PO ₄ , SO ₄			(Present/Absent)				1.43.0 / A IN
□ NEL	AC	☐ Az Co ☐ Other	ompliance 	On Ice:	L. Anderson	PHD Cm Barnh: 11	_	30 YOR	OI.	504.1)	or 8270	3, NO ₂ ,		(AC	(Presen				
	(Type)			# of Coo Cooler T		8+0.\=5.9 (°C)	1	3015D(G	8081 Pesticides/8082	EDB (Method 504.1)	PAHS by 8310 or 8270SIMS	Br, NO ₃ ,	8260 (VOA)	8270 (Semi-VOA)	Coliform				
			Sample Name	Containe Type and	d# Type	HEAL NO. 2169807	BTEX	(PH.)	8081	EDB	RCR/	(A)	8260	8270	Total				
			MW-8(0'-2,5')	14076	Tax None	Obl	X	Y		4	+	X					\Box		+
	1710	1.43	mw-8(2,5'-7,5')			001	Ŷ	Ŷ		+	+	$\overrightarrow{\nabla}$			=	-			H
-		SOIL				264	X	Ŷ				\Diamond					\Box		
	0816	SOIL	mw-8 (17,51-23,51)			065	X	X				X							
7.00	0830	Soil	mu-8(23,5'-27,5')	4		036	X	X			V	X							
		SOIL	mw-8(27,5-35,0')			007	X	X		4		X					\sqcup		
/	0845	SOIL	mu -8(35,0'-40,0')			008	X	X		-	-	X			-	4		+	-
9/16/21	1013	SIN	mw-8(40,0'-47,5') mw-8(47,5'-51.0')			009	X	V			+	X		-	-	+	\vdash	+	
9/16/21	1015	SOIL	mw-8 (51,d-52,0')			010	X	2	-	Ŧ	+	1				+	\vdash	+	
9/16/21	1017	SOIL	MW-8(52.0'-57.5')	V		017	X	X				X					\Box		
Date:	Time:	Relinquishe Relinquishe	ed by:	Received b	7 UB 9	Date Time 21 21 9:23 Date Time	Ren	narks	F	leas	enri	no a	Re	sal	15	16 om Oa	Om,	B	r age r
ogic.		1	mitted to Hall Environmental may be subc	Received b			_										7		- To To To



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

September 29, 2021

Wayne Price Richard Olsone Hinkle Shanor Law Firm P.O. Box 10 Roswell, NM 88202

TEL: (575) 622-6510

FAX:

RE: Energen Resource Corp West Lovington Strown Unit 8 OrderNo.: 2109970

Unit L Sec 34T15SR35E Lea Co NM

Dear Wayne Price:

Hall Environmental Analysis Laboratory received 24 sample(s) on 9/16/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (2.0'-10.0')

Project: Energen Resource Corp West Lovington

Collection Date: 9/9/2021 10:45:00 AM

Lab ID: 2109970-001

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/21/2021
Surr: DNOP	105	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021
Surr: BFB	95.5	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021
Toluene	ND	0.049	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	80.0	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 1 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (10.0' - 20.0')

Project: Energen Resource Corp West Lovington

Collection Date: 9/9/2021 11:14:00 AM

Lab ID: 2109970-002

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/21/2021
Surr: DNOP	84.1	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/21/2021
Surr: BFB	93.5	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021
Toluene	ND	0.048	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.048	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.097	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	78.8	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 2 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (20.0' - 30.0')

Project: Energen Resource Corp West Lovington

Collection Date: 9/9/2021 11:26:00 AM

Lab ID: 2109970-003

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/21/2021
Surr: DNOP	89.0	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/21/2021
Surr: BFB	92.7	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/21/2021
Toluene	ND	0.050	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.050	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.099	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	78.6	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	59	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 3 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (30.0' - 39.0')

Project: Energen Resource Corp West Lovington

Collection Date: 9/9/2021 11:47:00 AM

Lab ID: 2109970-004

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	9/23/2021
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	9/23/2021
Surr: DNOP	78.0	70-130	%Rec	1	9/23/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021
Surr: BFB	94.0	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021
Toluene	ND	0.049	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	80.5	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 4 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (39.0' - 50.0')Project:Energen Resource Corp West LovingtonCollection Date: 9/9/2021 1:35:00 PMLab ID:2109970-005Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed	
EPA METHOD 300.0: ANIONS						Analyst: CAS	
Chloride	ND		61	mg/Kg	20	9/22/2021	

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 5 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (50.0' - 54.5')

Project: Energen Resource Corp West Lovington

Collection Date: 9/9/2021 1:58:00 PM

Lab ID: 2109970-006

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/21/2021
Surr: DNOP	93.2	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021
Surr: BFB	91.8	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021
Toluene	ND	0.049	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	78.6	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 6 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (54.5' - 55.0')

Project: Energen Resource Corp West Lovington

Collection Date: 9/9/2021 2:00:00 PM

Lab ID: 2109970-007

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	9/21/2021
Surr: DNOP	91.5	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/21/2021
Surr: BFB	92.8	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021
Toluene	ND	0.048	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.048	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.097	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	79.2	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 7 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (55.0' - 59.0')

Project: Energen Resource Corp West Lovington

Lab ID: 2109970-008

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/21/2021
Surr: DNOP	97.3	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021
Surr: BFB	91.5	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/21/2021
Toluene	ND	0.049	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	78.0	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 8 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (59.0' - 67.0')

Project: Energen Resource Corp West Lovington

Collection Date: 9/9/2021 2:12:00 PM

Lab ID: 2109970-009

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/21/2021
Surr: DNOP	95.3	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021
Surr: BFB	95.2	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021
Toluene	ND	0.049	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	77.8	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 9 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energen Resource Corp West Lovington
 Lab ID: 2109970-010
 Matrix: SOIL
 Client Sample ID: MW-9 (67.5' - 77.5')
 Collection Date: 9/10/2021 2:34:00 PM
 Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 10 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (77.5' - 87.5')Project:Energen Resource Corp West LovingtonCollection Date: 9/10/2021 2:48:00 PMLab ID:2109970-011Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 11 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (87.5' - 97.5')Project:Energen Resource Corp West LovingtonCollection Date: 9/10/2021 4:00:00 PMLab ID:2109970-012Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 12 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (97.5' - 107.5')Project:Energen Resource Corp West LovingtonCollection Date: 9/10/2021 4:32:00 PMLab ID:2109970-013Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	9/21/2021
Surr: DNOP	96.3	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/21/2021
Surr: BFB	90.7	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/21/2021
Toluene	ND	0.050	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.050	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.099	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	77.6	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 13 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (107.5 - 117.5)Project:Energen Resource Corp West LovingtonCollection Date: 9/10/2021 4:46:00 PMLab ID:2109970-014Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 14 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (117.5 - 127.5')Project:Energen Resource Corp West LovingtonCollection Date: 9/10/2021 5:34:00 PMLab ID:2109970-015Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 15 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (127.5' - 137.5')

Project: Energen Resource Corp West Lovington

Collection Date: 9/11/2021 10:15:00 AM

Lab ID: 2109970-016

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 16 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm

Client Sample ID: MW-9 (137.5' - 147.5')

Project: Energen Resource Corp West Lovington

Collection Date: 9/11/2021 10:38:00 AM

Lab ID: 2109970-017

Matrix: SOIL

Received Date: 9/16/2021 9:30:00 AM

 Analyses
 Result
 MCL
 RL
 Qual
 Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Analyst: CAS

 Chloride
 ND
 60
 mg/Kg
 20
 9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 17 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
Client Sample ID: MW-9 (147.5' - 157.5)

Project: Energen Resource Corp West Lovington
Collection Date: 9/12/2021 9:56:00 AM

Lab ID: 2109970-018
Matrix: SOIL
Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	9/21/2021
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	9/21/2021
Surr: DNOP	97.0	70-130	%Rec	1	9/21/2021
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/21/2021
Surr: BFB	90.6	70-130	%Rec	1	9/21/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.024	mg/Kg	1	9/21/2021
Toluene	ND	0.049	mg/Kg	1	9/21/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/21/2021
Xylenes, Total	ND	0.098	mg/Kg	1	9/21/2021
Surr: 4-Bromofluorobenzene	77.6	70-130	%Rec	1	9/21/2021
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 18 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energen Resource Corp West Lovington
 Lab ID: 2109970-019
 Matrix: SOIL
 Client Sample ID: MW-9 (157.5' - 167.5')
 Collection Date: 9/12/2021 2:20:00 PM
 Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		61	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 19 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energen Resource Corp West Lovington
 Lab ID: 2109970-020
 Matrix: SOIL
 Client Sample ID: MW-9 (167.5' - 177.5')
 Collection Date: 9/13/2021 2:10:00 PM
 Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 20 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (177.5' - 187.5')Project:Energen Resource Corp West LovingtonCollection Date: 9/13/2021 4:17:00 PMLab ID:2109970-021Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	ND		60	mg/Kg	20	9/22/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 21 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energen Resource Corp West Lovington
 Lab ID: 2109970-022
 Matrix: SOIL
 Client Sample ID: MW-9 (187.5' - 190.0')
 Collection Date: 9/13/2021 5:02:00 PM
 Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/23/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 22 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT:Richard Olsone Hinkle Shanor Law FirmClient Sample ID: MW-9 (190.0' - 190.4')Project:Energen Resource Corp West LovingtonCollection Date: 9/13/2021 5:05:00 PMLab ID:2109970-023Matrix: SOILReceived Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL	RL Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND		60	mg/Kg	20	9/23/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

B = Analyte detected in the associated Method Blank

P = Sample pH Not in Range Page 23 of 24

Date Reported: 9/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Richard Olsone Hinkle Shanor Law Firm
 Project: Energen Resource Corp West Lovington
 Lab ID: 2109970-024
 Matrix: SOIL
 Client Sample ID: MW-9 (190.4' - 197.5')
 Collection Date: 9/13/2021 5:08:00 PM
 Received Date: 9/16/2021 9:30:00 AM

Analyses	Result	MCL RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	9/24/2021
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	9/24/2021
Surr: DNOP	102	70-130	%Rec	1	9/24/2021
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/22/2021
Surr: BFB	91.8	70-130	%Rec	1	9/22/2021
EPA METHOD 8021B: VOLATILES					Analyst: mb
Benzene	ND	0.025	mg/Kg	1	9/22/2021
Toluene	ND	0.049	mg/Kg	1	9/22/2021
Ethylbenzene	ND	0.049	mg/Kg	1	9/22/2021
Xylenes, Total	ND	0.099	mg/Kg	1	9/22/2021
Surr: 4-Bromofluorobenzene	79.8	70-130	%Rec	1	9/22/2021
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	9/23/2021

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

Qualifiers:

* = Value exeeds Maximum Contaminant Level(MCL)

MCL = EPA Maximum Contamination Level

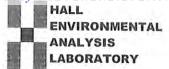
RL = Reporting Limit: Laboratory Detection Level

H = Holding times for preparation or analysis exceeded

ND = Not Detected at the RL

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$

P = Sample pH Not in Range Page 24 of 24



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

	Richard Olsone Hinkle Shanor Law Firm	Work Order	Number: 210	9970		RcptNo: 1
Received By:	Juan Rojas	9/16/2021 9:3	0:00 AM		fransag)	
Completed By:	Isaiah Ortiz	9/17/2021 3:5	2:38 PM		Hoursay)	2_/
Reviewed By:	12.02.00					
Chain of Custo	ody					
1. Is Chain of Cus	stody complete?		Yes	· 🗸	No 🗌	Not Present
2. How was the sa	ample delivered?		UP	<u>S</u>		
Log In						
	t made to cool the samples	?	Yes	V	No 🗌	NA 🗆
4. Were all sample	es received at a temperatur	e of >0° C to 6.0°	C Yes	~	No 🗌	NA 🗆
5. Sample(s) in pr	oper container(s)?		Yes	V	No 🗌	
6. Sufficient sampl	le volume for indicated test	(s)?	Yes	V	No 🗌	
7. Are samples (ex	cept VOA and ONG) prope	erly preserved?	Yes	~	No 🗌	
8. Was preservativ	e added to bottles?		Yes		No 🗸	NA \square
9. Received at leas	st 1 vial with headspace <1/	/4" for AQ VOA?	Yes		No 🗌	NA 🗸
10. Were any samp	le containers received brok	en?	Yes		No 🗸	1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
						# of preserved bottles checked
	match bottle labels?		Yes	~	No 🗌	for pH:
	cies on chain of custody) rrectly identified on Chain o	f Custody2	Von	V	No 🗆	(<2 or >12 unless noted) Adjusted?
	nalyses were requested?	Custody!	Yes Yes	V	No 🗆	
	times able to be met?		Yes		No 🗆	Checked by: 1/2 9/20/2
(If no, notify cust	tomer for authorization.)					/ 3. 11.
pecial Handlin	g (if applicable)					
15. Was client notif	ied of all discrepancies with	this order?	Yes		No 🗌	NA 🗹
Person No	otified:		Date:			
By Whom	:		/ia: ☐ eM	ail 🔲	Phone Fax	In Person
Regarding	: [
Client Inst	ructions:					
6. Additional rema	arks:					
7. <u>Cooler Information</u> Cooler No	Temp °C Condition S	Seal Intact Seal I	No Seal D	ate	Signed By	

None

None

Nonc

Received by:

Received by:

MW-9(67.5'-77.5

Soil MW-9/87.5

Relinquished by:

Relinquished by:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109

Remarks: Any Questions? Please Call OMB 0575. 626.1618 Also Send Copy of Results to embonviron gmail. Com

Date

016

011

210

Second Rush Project Name Pro	Chain-of-Custody Record	Turn-Around Time:	Page 2 OF L
Box D	Client:	☐ Standard ☐ Puch	
Project # Let Intent on of Goograd Water Tel. 505-345-3975 Fax 505-345-4107 Phone #: 575_622_6510		Project Name: Energenthesources Coxps.	
Project #. Pel Intest on of Goograd Nate Tel. 505-345-3975 Fax 505-345-4107 Phone #: 575_622_6510	Mailing Address:	Unit Lovington Strawn Unit # 8 Unit L, Sec. 34 7:153. R.35 E	
Phone #: 575. 622. 65/10 OCD CUSE # 1RP-2459 Analysis Request Email or Fast: 10/5ey & Invite burting. Co. Project Manager: OA/OC Package: Wayne price & G. 2007. AC Standard	FOSWELL, NM 88202-0010	Project #: Nel Incation of Gound Water	
Accreditation: Az Compliance Sampler: March Pr Intersect		OCD Case# 1RP-2457	Name of the state
Accreditation: Az Compliance Sampler: CM		Project Manager:	(A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B
Date Time Matrix Sample Name Container Type And Type	QA/QC Package: A Cobb & diamond beckened Standard Level 4 (Full Validation	rgg.cm Wayne Trice	3's (802 30 / ME PCB's PO4, 6
EDD (Type)		Later Control of the	NO ₂₂ NO ₂₂
08/0/24 14:32 SOL MW-9(107.5'-107.5) 1 4026 NONE 08/10/24 16:46 Soil MW-9(107.5'-127.5) 1 4026 NONE 08/10/24 17:34 Soil MW-9(107.5'-127.5) 1 4026 NONE 08/10/24 17:34 Soil MW-9(117.5'-127.5) 1 4026 NONE 08/10/24 10:38 Soil MW-9(127.5'-137.5) 1 4026 NONE 08/10/24 10:38 Soil MW-9(127.5'-147.5) 1 4026 NONE 08/10/24 10:38 Soil MW-9(147.5'-157.5) 1 4026 NONE 08/10/24 10:38 Soil MW-9(147.5'-157.5) 1 4026 NONE 08/10/24 10:38 Soil MW-9(157.5'-167.5) 1 4026 NONE 08/10/24 10:30 Soil MW-9(157.5'-177.5) 1 4026 NONE 08/10/24 10:17 Soil MW-9(177.5'-187.5) 1 4026 NONE 08/10/24 10:17 Soil MW-9(177.5'-187.5) 1 4026 NONE 08/10/24 17:02 Soil MW-9(177.5'-190.0') 1 4026 NONE 08/10/24 17:02 Soil MW-9(187.5'-190.0') 1 4026 NONE 08/10/24 17:02 Soil MW-9(187.5'-190.0') 1 4026 NONE 08/10/24 17:02 Soil MW-9(187.5'-190.0') 1 4026 NONE 07.1			(GBC) (GBC)
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09/10/21 17:34 Soil MW-9(107.5'-107.5) Fact None 015 016 017 018 018 019 019 019 019 019 019	09/10/21 16:32 SOL MW-9(97.5-10:	15) fac None 013	
	09/10/21 16:46 Soil MW-9(107.5 -117.	111111	
	8/10/21 17:34 Soil MW-9 (117.5-12)	Jac None	
	19/11/21 09:36 SOIL MW-9 (127.51-137.	5) For None Ollo	
9/6/21 1420 Soil MW-9 (157.5'-167.5') The None 018 X 1 19/6/21 1440 Soil MW-9 (167.5'-177.5') The None 070 X 1 19/6/21 1617 Soil MW-9 (167.5'-177.5') The None 070 X 1 19/6/21 1617 Soil MW-9 (177.5'-187.5') 1400 None 071 X 1 19/6/21 17:02 Soil MW-4 187.5'-190.0') 1400 None 072 X 1 19/6/21 17:05 Soil MW-9 (190:0-190.4') The None 073 X 19/6/21 17:05 Soil MW-9 (190:0-190.4') The None 073 X 19/6/21 17:05 Soil MW-9 (190:0-190.4') The None 073 X 19/6/21 17:05 Soil MW-9 (190:0-190.4') The None 074 X 19/6/21 17:05 Soil MW-9 (190:0-190.4') The None 074 X 19/6/21 17:05 Soil MW-9 (190:0-190.4') The None 074 X 19/6/21 18/6/21 1		5) Fax None 017	
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1/3/21 1617 5016 MW-9 (177.5'-1875') 1400 021 X 1400 021 X 1400 021 X 1400 021 X 1400 022 X 15/21 17:02 Soil MW-9 (190:0 -190:4') 1400 Nove 022 X 15/21 17:05 Soil MW-9 (190:0 -190:4') 1400 Nove 023 X 15/21 17:05 Soil MW-9 (190:0 -190:4') 1400 Nove 023 X 15/21 17:05 Soil MW-9 (190:0 -190:4') 1400 Nove 023 X 15/21 17:05 Soil MW-9 (190:0 -190:4') 1400 Nove 023	NET TO THE TOTAL T	Tax None	
9/13/21 17:02 Soil MW-4/187.5'-190.0') 1402 None 022 X 14/15/21 17:05 Soil MW-9 (190:0-190.4') Fac None 023 1/12/21 17:05 Soil MW-9 (190:0-190.4') Fac None 023 1/12/21 17:05 Soil MW-9 (190:0-190.4') 1405 None 024 X		Jac None OLO	
1/15/21 17:05 Soil MW-9 (190:0-190.4) First None 023		1 ilma	
9/12/2 17:08 SAIL MW-8/199 W-19751) 140 t NAME 074XX		V March	
Date: Time: Relinquished by: Blank Received by: Via: How Date Time Remarks: Send Results to Comb anvirong grain. Date: Time: Relinquished by: Received by: Via: Date Time Received by: Via: Date Time Call Comba 375-626.1615			
Date: Time: Relinquished by: Received by: Via: Date Time Of 11 CmBe 575-626. 1615			Remarks: Send Results to Combanviro egmail. Any Questions Please
9/15/4 0850 4 MAGNIADON 16/15 - 626. 16/15 3	112 11 11/14/2011	Received by: Via: Date Time	Call CMBe
If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	1 10 Solle College	UPS 9/16/1 9:30	

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Newell Law Firm

Project Name: W Lovington Strawn U. #8

Work Order: E203110

Job Number: 20046-0001

Received: 3/18/2022

Revision: 2

Report Reviewed By:

Walter Hinchman Laboratory Director 3/24/22

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 3/24/22

Natalie Gladden 10 W Adams Ave Ste E Lovington, NM 88260

Project Name: W Lovington Strawn U. #8

Workorder: E203110

Date Received: 3/18/2022 8:15:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/18/2022 8:15:00AM, under the Project Name: W Lovington Strawn U. #8.

The analytical test results summarized in this report with the Project Name: W Lovington Strawn U. #8 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881

Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

Alexa Michaels

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

T 1 ' 1D

Technical Representative/Client Services

Office: 505-421-LABS(5227)

Cell: 505-320-4759

ljarboe@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan

Technical Representative Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	Donoutoda
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	03/24/22 18:26

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
MW - 9S	E203110-01A	Aqueous	03/15/22	03/18/22	Poly 500mL
	E203110-01B	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-01C	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-01D	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
MW - 9M	E203110-02A	Aqueous	03/15/22	03/18/22	Poly 500mL
	E203110-02B	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-02C	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
MW - 9D	E203110-03A	Aqueous	03/15/22	03/18/22	Poly 500mL
	E203110-03B	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-03C	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
MW - 1	E203110-04A	Aqueous	03/15/22	03/18/22	Poly 250mL
	E203110-04B	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-04C	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
MW - 5	E203110-05A	Aqueous	03/15/22	03/18/22	Poly 250mL
	E203110-05B	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-05C	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
MW - 6	E203110-06A	Aqueous	03/15/22	03/18/22	Poly 250mL
	E203110-06B	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-06C	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
MW - 3	E203110-07A	Aqueous	03/15/22	03/18/22	Poly 250mL
	E203110-07B	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl
	E203110-07C	Aqueous	03/15/22	03/18/22	VOA Vial, 40mL; HCl



Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

	-	.203110-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst	: IY		Batch: 2212089
Acetone	ND	80.0	2	03/19/22	03/19/22	
Benzene	ND	2.00	2	03/19/22	03/19/22	
Bromobenzene	ND	2.00	2	03/19/22	03/19/22	
Bromochloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromodichloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromoform	ND	2.00	2	03/19/22	03/19/22	
Bromomethane	ND	4.00	2	03/19/22	03/19/22	
n-Butyl Benzene	ND	2.00	2	03/19/22	03/19/22	
sec-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
tert-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
Carbon Tetrachloride	ND	2.00	2	03/19/22	03/19/22	
Chlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Chloroethane	ND	4.00	2	03/19/22	03/19/22	
Chloroform	ND	10.0	2	03/19/22	03/19/22	
Chloromethane	ND	4.00	2	03/19/22	03/19/22	
2-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
4-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
Dibromochloromethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/19/22	03/19/22	
1,2-Dibromoethane (EDB)	ND	4.00	2	03/19/22	03/19/22	
Dibromomethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
1,3-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
1,4-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/19/22	03/19/22	
1,1-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
1.1-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
cis-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
trans-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
1,3-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
2,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
1,1-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
cis-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
trans-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/19/22	03/19/22	
Ethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/19/22	03/19/22	
Hexachlorobutadiene	ND	10.0	2	03/19/22	03/19/22	
2-Hexanone	ND	40.0	2	03/19/22	03/19/22	
Isopropylbenzene	ND	2.00	2	03/19/22	03/19/22	
4-Isopropyltoluene	ND	2.00	2	03/19/22	03/19/22	
2-Butanone (MEK)	ND	40.0	2	03/19/22	03/19/22	
	ND ND	4.00	2	03/19/22	03/19/22	
Methylene Chloride	ND	7.00	2	05/17/22	05/17/22	

Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

		Reportir	ıg			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Anal	yst: IY		Batch: 2212089
1-Methylnaphthalene	ND	20.0	2	03/19/22	03/19/22	
2-Methylnaphthalene	ND	20.0	2	03/19/22	03/19/22	
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/19/22	03/19/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/19/22	03/19/22	
Naphthalene	ND	10.0	2	03/19/22	03/19/22	
n-Propyl Benzene	ND	2.00	2	03/19/22	03/19/22	
Styrene	ND	2.00	2	03/19/22	03/19/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/19/22	03/19/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
Tetrachloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,1,1-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
Trichloroethene	ND	2.00	2	03/19/22	03/19/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/19/22	03/19/22	
1,2,3-Trichloropropane	ND	4.00	2	03/19/22	03/19/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/19/22	03/19/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Toluene	ND	2.00	2	03/19/22	03/19/22	
Vinyl chloride	ND	4.00	2	03/19/22	03/19/22	
o-Xylene	ND	2.00	2	03/19/22	03/19/22	
p,m-Xylene	ND	4.00	2	03/19/22	03/19/22	
Total Xylenes	ND	2.00	2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		95.1 %	70-130	03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130	03/19/22	03/19/22	
Surrogate: Toluene-d8		96.7 %	70-130	03/19/22	03/19/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

		E203110-01					
Analyte	Result	Reporting Limit	Di	lution	Prepared	Analyzed	Notes
,		mg/L			st: RAS		Batch: 2212068
Wet Chem/Gravimetric by SM2540C	mg/L			Amarys 1		02/22/22	Batch: 2212008
Total Dissolved Solids	228	40.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analys	st: KL		Batch: 2213006
рН @25°C	7.85			1	03/21/22 08:37	03/21/22 10:26	H5
Wet Chemistry by SM2320B	mg/L	mg/L		Analys	st: RAS		Batch: 2213016
Total Alkalinity (as CaCO3 at pH 4.5)	277	10.0		1	03/21/22	03/21/22	
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analys	st: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	657	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analys	st: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		95.1 %	70-130		03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130		03/19/22	03/19/22	
Surrogate: Toluene-d8		96.7 %	70-130		03/19/22	03/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analys	st: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		95.2 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analys	st: RKS		Batch: 2212087
Arsenic	ND	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	
Lead	ND	0.0100		1	03/19/22	03/20/22	
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	62.2	1.00	1	03/18/22	03/19/22	
Iron	ND	2.00	1	03/18/22	03/19/22	
Magnesium	10.4	1.00	1	03/18/22	03/19/22	
Potassium	2.46	1.00	1	03/18/22	03/19/22	
Sodium	47.7	2.00	1	03/18/22	03/19/22	
Sodium Absorption Ratio (CALC)	1.47		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	1.12	0.250	1	03/19/22	03/19/22	
Chloride	29.4	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 11:45	H1
Nitrate-N	0.631	0.250	1	03/19/22 07:59	03/19/22 11:45	H1
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 11:45	H1
Sulfate	69.0	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	



Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
ug/L	ug/L	Analyst:	: IY		Batch: 2212089
ND	80.0	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	4.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	4.00	2	03/19/22	03/19/22	
ND	10.0	2	03/19/22	03/19/22	
ND	4.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	2.00	2	03/19/22	03/19/22	
ND	10.0	2	03/19/22	03/19/22	
ND	4.00	2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
			03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
		2	03/19/22	03/19/22	
			03/19/22	03/19/22	
			03/19/22	03/19/22	
			03/19/22	03/19/22	
			03/19/22	03/19/22	
			03/19/22	03/19/22	
				03/19/22	
ND	4.00	4	03/17/44	03/13/22	
ND	20.0	2	03/19/22	03/19/22	
	ug/L ND ND ND ND ND ND ND ND ND ND ND ND ND	ug/L ug/L ND 80.0 ND 2.00 ND 4.00 ND 2.00 ND 4.00 ND 2.00 ND	Result Limit Dilution ug/L ug/L Analyst: ND 80.0 2 ND 2.00 2 ND 4.00 2 ND 2.00 2 ND 2.00 2 ND 2.00 2 ND	Result Limit Dilution Prepared ug/L ug/L Analyst: IY ND 80.0 2 03/19/22 ND 2.00 2 03/19/22 ND 4.00 2 03/19/22 ND 2.00 2 03/19/22 ND 4.00 2 03/19/22 ND 4.00 2 03/19/22 ND 2.00 2 03/19/22 ND	Result Limit Dilution Prepared Analyzed ug/L ug/L Analyst: IY ND 80.0 2 03/19/22 03/19/22 ND 2.00 2 03/19/22 </td

Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

		Reporting	<u> </u>			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	st: IY		Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/19/22	03/19/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/19/22	03/19/22	
Naphthalene	ND	10.0	2	03/19/22	03/19/22	
n-Propyl Benzene	ND	2.00	2	03/19/22	03/19/22	
Styrene	ND	2.00	2	03/19/22	03/19/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/19/22	03/19/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
Tetrachloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,1,1-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
Trichloroethene	ND	2.00	2	03/19/22	03/19/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/19/22	03/19/22	
1,2,3-Trichloropropane	ND	4.00	2	03/19/22	03/19/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/19/22	03/19/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Toluene	ND	2.00	2	03/19/22	03/19/22	
Vinyl chloride	ND	4.00	2	03/19/22	03/19/22	
o-Xylene	ND	2.00	2	03/19/22	03/19/22	
p,m-Xylene	ND	4.00	2	03/19/22	03/19/22	
Total Xylenes	ND	2.00	2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		95.7 %	70-130	03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	03/19/22	03/19/22	
Surrogate: Toluene-d8		98.4 %	70-130	03/19/22	03/19/22	

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

Wet Chemistry by 9040C/4500H+B pH Units pH Units pH Units Analyst: RAS Batch: 2213016 bit (a)25°C 8,02 mg/L mg/L Analyst: RAS Batch: 2213016 Wet Chemistry by SM2320B mg/L 10.0 1 03/21/22 03/21/22 Batch: 2213016 Getal Alkalinity (as CaCO3 at pH 4.5) 162 10.0 1 03/21/22 03/21/22 Batch: 2213009 Specific Conductance (@ 25 C) 736 10.0 1 03/21/22 03/21/22 Batch: 2213009 Specific Conductance (@ 25 C) 736 10.0 1 03/21/22 03/21/22 Batch: 2213009 Specific Conductance (@ 25 C) 736 10.0 1 03/21/22 03/21/22 Batch: 2213009 Specific Conductance (@ 25 C) 736 10.20 2 03/19/22 03/19/22 Batch: 2213009 Starting Engle Conductance (@ 25 C) 737 70-130 03/19/22 03/19/22 03/19/22 10/19/22 03/19/22 03/19/22 03/19/22 03/19/22 03/19/22 03/19/22 03/1			2200110 02					
Met Chem/Gravimetric by SM2540C mg/L mg/L Analyst: RAS Batch: 2212068 Total Dissolved Solids 294 14.3 1 03/11/22 03/21/22 Met Chemistry by 9040C/4500H+B pH Units pH Units Analyst: KL Batch: 2213006 Higher Chemistry by 9040C/4500H+B mg/L mg/L Analyst: RAS Batch: 2213006 Higher Chemistry by SM2320B mg/L mg/L Analyst: RAS Batch: 2213016 Total Alkalinity (as CaCO3 at pH 4.5) 162 10.0 1 03/21/22 03/21/22 Met Chemistry by 9050A/2510B uS/cm uS/cm uS/cm Analyst: RAS Batch: 2213009 Specific Conductance (@ 25 C) 736 10.0 1 03/21/22 03/21/22 Nonhalogenated Organics by EPA 8015D - GRO mg/L mg/L Analyst: IV Batch: 2212089 Gasoline Range Organics (C6-C10) ND 0.200 2 03/19/22 03/19/22 Nonhalogenated Organics by EPA 8015D - DRO/ORO mg/L mg/L Analyst: IV Batch: 2212089 Higher Chemistry by 9050A/2510B uS/cm mg/L Analyst: IV Batch: 2212089 Higher Chemistry by 9050A/2510B uS/cm	Analyte	Result		D	ilution	Prepared	Analyzed	Notes
Part Part	, ·	mg/L	mg/L		Analys	•		Batch: 2212068
No.	Total Dissolved Solids						03/22/22	7,00
March Marc	Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analys	st: KL		Batch: 2213006
Total Alkalinity (as CaCO3 at pH 4.5) 162 10.0 1 03/21/22 03/21/22 03/21/22	рН @25°C	8.02			1	03/21/22 08:37	03/21/22 10:26	Н5
Met Chemistry by 9050A/2510B uS/cm uS/cm uS/cm Analyst: RAS Batch: 2213009	Wet Chemistry by SM2320B	mg/L	mg/L		Analys	st: RAS		Batch: 2213016
Specific Conductance (@ 25 C) 736 10.0 1 03/21/22 03/21/22 03/21/22	Total Alkalinity (as CaCO3 at pH 4.5)	162	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO mg/L mg/L Analyst: IY Batch: 2212089	Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analys	st: RAS		Batch: 2213009
ND 0.200 2 03/19/22 03/	Specific Conductance (@ 25 C)	736	10.0		1	03/21/22	03/21/22	
ND 0.200 2 03/19/22 03/	Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analys	st: IY		Batch: 2212089
101 % 70-130 03/19/22 03/19	Gasoline Range Organics (C6-C10)	ND	0.200		2	03/19/22	03/19/22	-
Surrogate: Toluene-d8 98.4 % 70-130 03/19/22 03/19/22 03/19/22 Nonhalogenated Organics by EPA 8015D - DRO/ORO mg/L mg/L Analyst: JL Batch: 2213017 Diesel Range Organics (C10-C28) 2.56 1.00 1 03/21/22 03/21/22 Dil Range Organics (C28-C36) ND 2.00 1 03/21/22 03/21/22 Surrogate: n-Nonane 105 % 50-200 03/21/22 03/21/22 Total Metals by EPA 6010C mg/L mg/L Analyst: RKS Batch: 2212087 Arsenic ND 0.0200 1 03/19/22 03/20/22 Barium ND 0.250 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 Chromium ND 0.0200 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0100 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0100 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0100 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0100 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0100 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0100 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded ND 0.0500 1 03/19/22 03/20/22 C4, C6 Caded	Surrogate: Bromofluorobenzene		95.7 %	70-130		03/19/22	03/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO mg/L mg/L Analyst: JL Batch: 2213017 Diesel Range Organics (C10-C28) 2.56 1.00 1 03/21/22 03/21/22 Dil Range Organics (C28-C36) ND 2.00 1 03/21/22 03/21/22 Dil Range Organics (C28-C36) ND 2.00 1 03/21/22 03/21/22 Diana Metals by EPA 6010C mg/L mg/L Analyst: RKS Batch: 2212087 Arsenic ND 0.0200 1 03/19/22 03/20/22 Barium ND 0.250 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0200 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0200 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0500 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0	Surrogate: 1,2-Dichloroethane-d4		101 %	70-130		03/19/22	03/19/22	
Diesel Range Organics (C10-C28) 2.56 1.00 1 03/21/22 0	Surrogate: Toluene-d8		98.4 %	70-130		03/19/22	03/19/22	
ND 2.00 1 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/20/22 03/2	Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analys	st: JL		Batch: 2213017
Surrogate: n-Nonane	Diesel Range Organics (C10-C28)	2.56	1.00		1	03/21/22	03/21/22	
Flotal Metals by EPA 6010C mg/L mg/L Analyst: RKS Batch: 2212087 Arsenic ND 0.0200 1 03/19/22 03/20/22 Barium ND 0.250 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Chromium ND 0.0200 1 03/19/22 03/20/22 C4, C6 Lead ND 0.0100 1 03/19/22 03/20/22 C4, C6 Selenium ND 0.0500 1 03/19/22 03/20/22 C4, C6	Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Arsenic ND 0.0200 1 03/19/22 03/20/22 C4, C6 Barium ND 0.250 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 Chromium ND 0.0200 1 03/19/22 03/20/22 C4, C6 Lead ND 0.0100 1 03/19/22 03/20/22 C4, C6 Selenium ND 0.0500 1 03/19/22 03/20/22 C4, C6 ND 0.0500 1 03/19/22 03/20/22 C4, C6 ND 0.0500 1 03/19/22 03/20/22	Surrogate: n-Nonane		105 %	50-200		03/21/22	03/21/22	
Arsenic ND 0.0200 1 03/19/22 03/20/22 C4, C6 Barium ND 0.250 1 03/19/22 03/20/22 C4, C6 Cadmium ND 0.0100 1 03/19/22 03/20/22 C4, C6 Chromium ND 0.0200 1 03/19/22 03/20/22 C4, C6 Lead ND 0.0100 1 03/19/22 03/20/22 C4, C6 Selenium ND 0.0500 1 03/19/22 03/20/22 C4, C6	Total Metals by EPA 6010C	mg/L	mg/L		Analys	st: RKS		Batch: 2212087
Cadmium ND 0.0100 1 03/19/22 03/20/22 Chromium ND 0.0200 1 03/19/22 03/20/22 C4, C6 Lead ND 0.0100 1 03/19/22 03/20/22 C4, C6 Selenium ND 0.0500 1 03/19/22 03/20/22 C4, C6	Arsenic	ND	0.0200		1	03/19/22	03/20/22	
ND 0.0200 1 03/19/22 03/20/22 C4, C6 Lead ND 0.0100 1 03/19/22 03/20/22 C4, C6 Selenium ND 0.0500 1 03/19/22 03/20/22 C4, C6	Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Lead ND 0.0100 1 03/19/22 03/20/22 C4, C6 Selenium ND 0.0500 1 03/19/22 03/20/22	Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Selenium ND 0.0500 1 03/19/22 03/20/22	Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Scientific 12 0.000	Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Silver ND 0.0100 1 03/19/22 03/20/22	Selenium	ND	0.0500		1	03/19/22	03/20/22	
	Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/L	mg/L	Analys	st: RKS		Batch: 2212080
49.9	1.00	1	03/18/22	03/19/22	
ND	2.00	1	03/18/22	03/19/22	
14.2	1.00	1	03/18/22	03/19/22	
3.51	1.00	1	03/18/22	03/19/22	
71.3	2.00	1	03/18/22	03/19/22	
2.29		1	03/24/22	03/24/22	
mg/L	mg/L	Analys	st: RAS		Batch: 2212086
1.09	0.250	1	03/19/22	03/19/22	
51.5	2.00	1	03/19/22	03/19/22	
ND	0.250	1	03/19/22 07:59	03/19/22 12:06	H1
0.466	0.250	1	03/19/22 07:59	03/19/22 12:06	H1
ND	0.250	1	03/19/22 07:59	03/19/22 12:06	H1
120	2.00	1	03/19/22	03/19/22	
120 ug/L	2.00 ug/L	l Analys	03/19/22 st: RKS	03/19/22	Batch: 2212088
	mg/L 49.9 ND 14.2 3.51 71.3 2.29 mg/L 1.09 51.5 ND 0.466	Result Limit mg/L mg/L 49.9 1.00 ND 2.00 14.2 1.00 3.51 1.00 71.3 2.00 2.29 mg/L mg/L 1.09 51.5 2.00 ND 0.250 0.466 0.250	Result Limit Dilution mg/L mg/L Analys 49.9 1.00 1 ND 2.00 1 14.2 1.00 1 3.51 1.00 1 71.3 2.00 1 2.29 1 mg/L mg/L Analys 1.09 0.250 1 51.5 2.00 1 ND 0.250 1 0.466 0.250 1	Result Limit Dilution Prepared mg/L mg/L Analyst: RKS 49.9 1.00 1 03/18/22 ND 2.00 1 03/18/22 14.2 1.00 1 03/18/22 3.51 1.00 1 03/18/22 71.3 2.00 1 03/18/22 2.29 1 03/18/22 mg/L Analyst: RAS 1.09 0.250 1 03/19/22 51.5 2.00 1 03/19/22 ND 0.250 1 03/19/22 07:59 0.466 0.250 1 03/19/22 07:59	Result Limit Dilution Prepared Analyzed mg/L mg/L Analyst: RKS 49.9 1.00 1 03/18/22 03/19/22 ND 2.00 1 03/18/22 03/19/22 14.2 1.00 1 03/18/22 03/19/22 3.51 1.00 1 03/18/22 03/19/22 71.3 2.00 1 03/18/22 03/19/22 2.29 1 03/24/22 03/24/22 mg/L mg/L Analyst: RAS 1.09 0.250 1 03/19/22 03/19/22 51.5 2.00 1 03/19/22 03/19/22 ND 0.250 1 03/19/22 07:59 03/19/22 12:06 0.466 0.250 1 03/19/22 07:59 03/19/22 12:06



Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/20226:26:08PM

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:	IY		Batch: 2212089
acetone	ND	80.0	2	03/19/22	03/19/22	
Benzene	ND	2.00	2	03/19/22	03/19/22	
Bromobenzene	ND	2.00	2	03/19/22	03/19/22	
Bromochloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromodichloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromoform	ND	2.00	2	03/19/22	03/19/22	
Bromomethane	ND	4.00	2	03/19/22	03/19/22	
-Butyl Benzene	ND	2.00	2	03/19/22	03/19/22	
ec-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
ert-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
arbon Tetrachloride	ND	2.00	2	03/19/22	03/19/22	
hlorobenzene	ND	2.00	2	03/19/22	03/19/22	
hloroethane	ND	4.00	2	03/19/22	03/19/22	
hloroform	ND	10.0	2	03/19/22	03/19/22	
hloromethane	ND	4.00	2	03/19/22	03/19/22	
-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
ibromochloromethane	ND	2.00	2	03/19/22	03/19/22	
2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/19/22	03/19/22	
2-Dibromoethane (EDB)	ND	4.00	2	03/19/22	03/19/22	
ibromomethane	ND	2.00	2	03/19/22	03/19/22	
2-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
3-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
4-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
ichlorodifluoromethane (Freon-12)	ND	4.00	2	03/19/22	03/19/22	
1-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
2-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
1-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
s-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
ans-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
,3-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
,1-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
s-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
ans-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
viisopropyl Ether (DIPE)	ND	2.00	2	03/19/22	03/19/22	
thylbenzene	ND	2.00	2	03/19/22	03/19/22	
thyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/19/22	03/19/22	
exachlorobutadiene	ND	10.0	2	03/19/22	03/19/22	
Hexanone	ND	40.0	2	03/19/22	03/19/22	
opropylbenzene	ND	2.00	2	03/19/22	03/19/22	
opropytoenzene Isopropyttoluene	ND	2.00	2	03/19/22	03/19/22	
	ND ND	40.0	2	03/19/22	03/19/22	
Butanone (MEK) lethylene Chloride	ND ND	4.00	2	03/19/22	03/19/22	
	ND ND	20.0	2	03/19/22	03/19/22	
-Methylnaphthalene -Methylnaphthalene	ND ND	20.0	2	03/19/22	03/19/22	

Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

Reporting							
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes	
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	st: IY		Batch: 2212089	
1-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/19/22	03/19/22		
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/19/22	03/19/22		
Naphthalene	ND	10.0	2	03/19/22	03/19/22		
n-Propyl Benzene	ND	2.00	2	03/19/22	03/19/22		
Styrene	ND	2.00	2	03/19/22	03/19/22		
ert-Amyl Methyl ether (TAME)	ND	2.00	2	03/19/22	03/19/22		
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22		
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22		
Tetrachloroethene	ND	2.00	2	03/19/22	03/19/22		
1,2,3-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22		
1,2,4-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22		
1,1,1-Trichloroethane	ND	2.00	2	03/19/22	03/19/22		
1,1,2-Trichloroethane	ND	2.00	2	03/19/22	03/19/22		
Trichloroethene	ND	2.00	2	03/19/22	03/19/22		
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/19/22	03/19/22		
1,2,3-Trichloropropane	ND	4.00	2	03/19/22	03/19/22		
1,2,4-Trimethylbenzene	ND	10.0	2	03/19/22	03/19/22		
1,3,5-Trimethylbenzene	ND	2.00	2	03/19/22	03/19/22		
Toluene	ND	2.00	2	03/19/22	03/19/22		
Vinyl chloride	ND	4.00	2	03/19/22	03/19/22		
p-Xylene	ND	2.00	2	03/19/22	03/19/22		
o,m-Xylene	ND	4.00	2	03/19/22	03/19/22		
Total Xylenes	ND	2.00	2	03/19/22	03/19/22		
Surrogate: Bromofluorobenzene		95.0 %	70-130	03/19/22	03/19/22		
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/19/22	03/19/22		
Surrogate: Toluene-d8		96.9 %	70-130	03/19/22	03/19/22		

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

		E203110-03					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L		Analys	st: RAS		Batch: 2212068
Total Dissolved Solids	289	10.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analys	st: KL		Batch: 2213006
pH @25°C	7.77			1	03/21/22 08:37	03/21/22 10:26	Н5
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analys	st: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	616	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analys	st: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		95.0 %	70-130		03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130		03/19/22	03/19/22	
Surrogate: Toluene-d8		96.9 %	70-130		03/19/22	03/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analys	st: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		103 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analys	st: RKS		Batch: 2212087
Arsenic	ND	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	48.4	1.00	1	03/18/22	03/19/22	
Iron	ND	2.00	1	03/18/22	03/19/22	
Magnesium	14.0	1.00	1	03/18/22	03/19/22	
Potassium	3.23	1.00	1	03/18/22	03/19/22	
Sodium	48.4	2.00	1	03/18/22	03/19/22	
Sodium Absorption Ratio (CALC)	1.58		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	0.830	0.250	1	03/19/22	03/19/22	
Chloride	44.4	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 12:28	H1
Nitrate-N	0.417	0.250	1	03/19/22 07:59	03/19/22 12:28	H1
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 12:28	H1
Sulfate	93.4	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088



Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/20226:26:08PM

MW - 1 E203110-04

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst	: IY		Batch: 2212089
Acetone	ND	80.0	2	03/19/22	03/19/22	
Benzene	ND	2.00	2	03/19/22	03/19/22	
Bromobenzene	ND	2.00	2	03/19/22	03/19/22	
Bromochloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromodichloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromoform	ND	2.00	2	03/19/22	03/19/22	
Bromomethane	ND	4.00	2	03/19/22	03/19/22	
n-Butyl Benzene	ND	2.00	2	03/19/22	03/19/22	
ec-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
ert-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
Carbon Tetrachloride	ND	2.00	2	03/19/22	03/19/22	
Chlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Chloroethane	ND	4.00	2	03/19/22	03/19/22	
Chloroform	ND	10.0	2	03/19/22	03/19/22	
Chloromethane	ND	4.00	2	03/19/22	03/19/22	
2-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
Dibromochloromethane	ND	2.00	2	03/19/22	03/19/22	
,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/19/22	03/19/22	
,2-Dibromoethane (EDB)	ND	4.00	2	03/19/22	03/19/22	
Dibromomethane	ND	2.00	2	03/19/22	03/19/22	
,2-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
,3-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
,4-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/19/22	03/19/22	
,1-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
,2-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
,1-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
sis-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
rans-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
,3-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
2,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
1,1-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
is-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
rans-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/19/22	03/19/22	
Ethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/19/22	03/19/22	
Hexachlorobutadiene	ND	10.0	2	03/19/22	03/19/22	
-Hexanone	ND	40.0	2	03/19/22	03/19/22	
sopropylbenzene	ND	2.00	2	03/19/22	03/19/22	
i-Isopropyltoluene	ND	2.00	2	03/19/22	03/19/22	
2-Butanone (MEK)	ND	40.0	2	03/19/22	03/19/22	
Methylene Chloride	ND	4.00	2	03/19/22	03/19/22	
-Methylnaphthalene	ND	20.0	2	03/19/22	03/19/22	
2-Methylnaphthalene	ND	20.0	2	03/19/22	03/19/22	

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

MW - 1 E203110-04

Reporting							
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes	
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	t: IY		Batch: 2212089	
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/19/22	03/19/22		
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/19/22	03/19/22		
Naphthalene	ND	10.0	2	03/19/22	03/19/22		
n-Propyl Benzene	ND	2.00	2	03/19/22	03/19/22		
Styrene	ND	2.00	2	03/19/22	03/19/22		
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/19/22	03/19/22		
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22		
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22		
Tetrachloroethene	ND	2.00	2	03/19/22	03/19/22		
1,2,3-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22		
1,2,4-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22		
1,1,1-Trichloroethane	ND	2.00	2	03/19/22	03/19/22		
1,1,2-Trichloroethane	ND	2.00	2	03/19/22	03/19/22		
Trichloroethene	ND	2.00	2	03/19/22	03/19/22		
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/19/22	03/19/22		
1,2,3-Trichloropropane	ND	4.00	2	03/19/22	03/19/22		
1,2,4-Trimethylbenzene	ND	10.0	2	03/19/22	03/19/22		
1,3,5-Trimethylbenzene	ND	2.00	2	03/19/22	03/19/22		
Toluene	ND	2.00	2	03/19/22	03/19/22		
Vinyl chloride	ND	4.00	2	03/19/22	03/19/22		
o-Xylene	ND	2.00	2	03/19/22	03/19/22		
p,m-Xylene	ND	4.00	2	03/19/22	03/19/22		
Total Xylenes	ND	2.00	2	03/19/22	03/19/22		
Surrogate: Bromofluorobenzene		95.1 %	70-130	03/19/22	03/19/22		
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/19/22	03/19/22		
Surrogate: Toluene-d8		98.4 %	70-130	03/19/22	03/19/22		

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

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E203110-04

		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L	I	Analyst: RAS		Batch: 2212068
Total Dissolved Solids	352	25.0	1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units	A	Analyst: KL		Batch: 2213006
pH @25°C	7.81		1	03/21/22 08:37	03/21/22 10:26	Н5
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm	A	Analyst: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	614	10.0	1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L	I	Analyst: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200	2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		95.1 %	70-130	03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/19/22	03/19/22	
Surrogate: Toluene-d8		98.4 %	70-130	03/19/22	03/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L	A	Analyst: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00	1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00	1	03/21/22	03/21/22	
Surrogate: n-Nonane		85.9 %	50-200	03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L	A	Analyst: RKS		Batch: 2212087
Arsenic	ND	0.0200	1	03/19/22	03/20/22	<u> </u>
Barium	ND	0.250	1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100	1	03/19/22	03/20/22	
Chromium	ND	0.0200	1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100	1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500	1	03/19/22	03/20/22	
Silver	ND	0.0100	1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

MW - 1 E203110-04

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	68.4	1.00	1	03/18/22	03/19/22	
fron	ND	2.00	1	03/18/22	03/19/22	
Magnesium	9.79	1.00	1	03/18/22	03/19/22	
Potassium	1.23	1.00	1	03/18/22	03/19/22	
Sodium	38.4	2.00	1	03/18/22	03/19/22	
Sodium Absorption Ratio (CALC)	1.15		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	1.10	0.250	1	03/19/22	03/19/22	
Chloride	29.4	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 12:49	H1
Nitrate-N	1.61	0.250	1	03/19/22 07:59	03/19/22 12:49	H1
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 12:49	H1
Sulfate	83.2	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	

Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

MW - 5 E203110-05

	Г	E203110-05				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:	IY		Batch: 2212089
Acetone	ND	80.0	2	03/19/22	03/19/22	
Benzene	ND	2.00	2	03/19/22	03/19/22	
Bromobenzene	ND	2.00	2	03/19/22	03/19/22	
Bromochloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromodichloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromoform	ND	2.00	2	03/19/22	03/19/22	
Bromomethane	ND	4.00	2	03/19/22	03/19/22	
n-Butyl Benzene	ND	2.00	2	03/19/22	03/19/22	
sec-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
tert-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
Carbon Tetrachloride	ND	2.00	2	03/19/22	03/19/22	
Chlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Chloroethane	ND	4.00	2	03/19/22	03/19/22	
Chloroform	ND	10.0	2	03/19/22	03/19/22	
Chloromethane	ND	4.00	2	03/19/22	03/19/22	
2-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
4-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
Dibromochloromethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/19/22	03/19/22	
1,2-Dibromoethane (EDB)	ND	4.00	2	03/19/22	03/19/22	
Dibromomethane (200)	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
1,3-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
1,4-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/19/22	03/19/22	
1,1-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
cis-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
trans-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
1,3-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
	ND	2.00	2	03/19/22	03/19/22	
2,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
1,1-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
cis-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
trans-1,3-Dichloropropene			2	03/19/22	03/19/22	
Diisopropyl Ether (DIPE)	ND ND	2.00	2	03/19/22	03/19/22	
Ethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/19/22	03/19/22	
Hexachlorobutadiene	ND ND	10.0	2	03/19/22	03/19/22	
2-Hexanone	ND	40.0				
Isopropylbenzene	ND	2.00	2	03/19/22	03/19/22	
4-Isopropyltoluene	ND	2.00	2	03/19/22	03/19/22	
2-Butanone (MEK)	ND	40.0	2	03/19/22	03/19/22	
Methylene Chloride	ND	4.00	2	03/19/22	03/19/22	
1-Methylnaphthalene	ND	20.0	2	03/19/22	03/19/22	
2-Methylnaphthalene	ND	20.0	2	03/19/22	03/19/22	

Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

MW - 5 E203110-05

Reporting						
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	t: IY		Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/19/22	03/19/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/19/22	03/19/22	
Naphthalene	ND	10.0	2	03/19/22	03/19/22	
n-Propyl Benzene	ND	2.00	2	03/19/22	03/19/22	
Styrene	ND	2.00	2	03/19/22	03/19/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/19/22	03/19/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
Tetrachloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,1,1-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
Trichloroethene	ND	2.00	2	03/19/22	03/19/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/19/22	03/19/22	
1,2,3-Trichloropropane	ND	4.00	2	03/19/22	03/19/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/19/22	03/19/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Toluene	ND	2.00	2	03/19/22	03/19/22	
Vinyl chloride	ND	4.00	2	03/19/22	03/19/22	
o-Xylene	ND	2.00	2	03/19/22	03/19/22	
p,m-Xylene	ND	4.00	2	03/19/22	03/19/22	
Total Xylenes	ND	2.00	2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		94.3 %	70-130	03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		98.9 %	70-130	03/19/22	03/19/22	
Surrogate: Toluene-d8		97.8 %	70-130	03/19/22	03/19/22	

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

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E203110-05

Analyte	Result	Reporting Limit	Di	lution	Prepared	Analyzed	Notes
Amaye			DI		*	7 mary zea	
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L		Analys			Batch: 2212068
Total Dissolved Solids	178	20.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analys	t: KL		Batch: 2213006
рH @25°С	7.73			1	03/21/22 08:37	03/21/22 10:26	Н5
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analys	t: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	628	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analys	t: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		94.3 %	70-130		03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		98.9 %	70-130		03/19/22	03/19/22	
Surrogate: Toluene-d8		97.8 %	70-130		03/19/22	03/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analys	t: ЛL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		104 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analys	t: RKS		Batch: 2212087
Arsenic	ND	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

MW - 5 E203110-05

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	72.1	1.00	1	03/18/22	03/23/22	
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	9.56	1.00	1	03/18/22	03/23/22	
Potassium	1.69	1.00	1	03/18/22	03/23/22	C1, C6
Sodium	45.6	2.00	1	03/18/22	03/23/22	
Sodium Absorption Ratio (CALC)	1.34		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	1.24	0.250	1	03/19/22	03/19/22	
Chloride	29.0	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 13:11	H1
Nitrate-N	2.03	0.250	1	03/19/22 07:59	03/19/22 13:11	H1
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 13:11	H1
Sulfate	81.1	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	



Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/20226:26:08PM

MW - 6 E203110-06

		2203110-06				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
	ug/L	ug/L	Analyst: IY			Batch: 2212089
Volatile Organic Compounds by EPA 8260B Acetone	ND	80.0	2	03/19/22	03/19/22	Batch. 221200)
Benzene	ND	2.00	2	03/19/22	03/19/22	
Bromobenzene	ND	2.00	2	03/19/22	03/19/22	
Bromochloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromodichloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromoform	ND	2.00	2	03/19/22	03/19/22	
Bromomethane	ND	4.00	2	03/19/22	03/19/22	
n-Butyl Benzene	ND	2.00	2	03/19/22	03/19/22	
ec-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
ert-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
Carbon Tetrachloride	ND	2.00	2	03/19/22	03/19/22	
Chlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Chloroethane	ND	4.00	2	03/19/22	03/19/22	
Chloroform	ND	10.0	2	03/19/22	03/19/22	
Chloromethane	ND	4.00	2	03/19/22	03/19/22	
2-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
4-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
Dibromochloromethane	ND	2.00	2	03/19/22	03/19/22	
,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/19/22	03/19/22	
,2-Dibromoethane (EDB)	ND	4.00	2	03/19/22	03/19/22	
Dibromomethane	ND	2.00	2	03/19/22	03/19/22	
,2-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
,3-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
,4-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/19/22	03/19/22	
,1-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
,2-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
,1-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
is-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
rans-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
,3-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
2,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
,1-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
is-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
rans-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/19/22	03/19/22	
Ethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/19/22	03/19/22	
lexachlorobutadiene	ND	10.0	2	03/19/22	03/19/22	
-Hexanone	ND	40.0	2	03/19/22	03/19/22	
sopropylbenzene	ND	2.00	2	03/19/22	03/19/22	
l-Isopropyltoluene	ND	2.00	2	03/19/22	03/19/22	
Isopropytioliteile Butanone (MEK)	ND	40.0	2	03/19/22	03/19/22	
Methylene Chloride	ND	4.00	2	03/19/22	03/19/22	
-	ND ND	20.0	2	03/19/22	03/19/22	
l-Methylnaphthalene 2-Methylnaphthalene	ND ND	20.0	2	03/19/22	03/19/22	

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

MW - 6 E203110-06

		Reporting	,			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	st: IY		Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/19/22	03/19/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/19/22	03/19/22	
Naphthalene	ND	10.0	2	03/19/22	03/19/22	
n-Propyl Benzene	ND	2.00	2	03/19/22	03/19/22	
Styrene	ND	2.00	2	03/19/22	03/19/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/19/22	03/19/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
Tetrachloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,1,1-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
Trichloroethene	ND	2.00	2	03/19/22	03/19/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/19/22	03/19/22	
1,2,3-Trichloropropane	ND	4.00	2	03/19/22	03/19/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/19/22	03/19/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Toluene	ND	2.00	2	03/19/22	03/19/22	
Vinyl chloride	ND	4.00	2	03/19/22	03/19/22	
o-Xylene	ND	2.00	2	03/19/22	03/19/22	
p,m-Xylene	ND	4.00	2	03/19/22	03/19/22	
Total Xylenes	ND	2.00	2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		94.7 %	70-130	03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	03/19/22	03/19/22	
Surrogate: Toluene-d8		97.1 %	70-130	03/19/22	03/19/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

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		E203110-06					
Analyte	Result	Reporting Limit	D	ilution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L		Analy	st: RAS		Batch: 2212068
Total Dissolved Solids	2360	25.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analy	st: KL		Batch: 2213006
pH @25°C	7.78			1	03/21/22 08:37	03/21/22 10:26	Н5
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analy	st: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	4190	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analy	st: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		94.7 %	70-130		03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130		03/19/22	03/19/22	
Surrogate: Toluene-d8		97.1 %	70-130		03/19/22	03/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analy	st: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		108 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analy	st: RKS		Batch: 2212087
Arsenic	0.0369	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

MW - 6 E203110-06

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	78.5	1.00	1	03/18/22	03/23/22	
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	5.34	1.00	1	03/18/22	03/23/22	
Potassium	4.83	1.00	1	03/18/22	03/23/22	C1, C6
Sodium	856	20.0	10	03/18/22	03/23/22	C4, C6
Sodium Absorption Ratio (CALC)	25.2		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	ND	5.00	20	03/19/22	03/19/22	
Chloride	1140	40.0	20	03/19/22	03/19/22	
Nitrite-N	ND	5.00	20	03/19/22 07:59	03/19/22 13:32	H1
Nitrate-N	ND	5.00	20	03/19/22 07:59	03/19/22 13:32	H1
o-Phosphate-P	ND	5.00	20	03/19/22 07:59	03/19/22 13:32	H1
	230	40.0	20	03/19/22	03/19/22	
Sulfate	230					
Sulfate Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088

Newell Law FirmProject Name:W Lovington Strawn U. #810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

MW - 3 E203110-07

	r	E203110-07				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:	IY		Batch: 2212089
Acetone	ND	80.0	2	03/19/22	03/19/22	
Benzene	ND	2.00	2	03/19/22	03/19/22	
Bromobenzene	ND	2.00	2	03/19/22	03/19/22	
Bromochloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromodichloromethane	ND	2.00	2	03/19/22	03/19/22	
Bromoform	ND	2.00	2	03/19/22	03/19/22	
Bromomethane	ND	4.00	2	03/19/22	03/19/22	
n-Butyl Benzene	ND	2.00	2	03/19/22	03/19/22	
sec-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
tert-Butylbenzene	ND	2.00	2	03/19/22	03/19/22	
Carbon Tetrachloride	ND	2.00	2	03/19/22	03/19/22	
Chlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Chloroethane	ND	4.00	2	03/19/22	03/19/22	
Chloroform	ND	10.0	2	03/19/22	03/19/22	
Chloromethane	ND	4.00	2	03/19/22	03/19/22	
2-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
4-Chlorotoluene	ND	2.00	2	03/19/22	03/19/22	
Dibromochloromethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/19/22	03/19/22	
1,2-Dibromoethane (EDB)	ND	4.00	2	03/19/22	03/19/22	
Dibromomethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
1,3-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
1,4-Dichlorobenzene	ND	2.00	2	03/19/22	03/19/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/19/22	03/19/22	
1,1-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
cis-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
trans-1,2-Dichloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
1,3-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
2,2-Dichloropropane	ND	2.00	2	03/19/22	03/19/22	
1,1-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
cis-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
trans-1,3-Dichloropropene	ND	2.00	2	03/19/22	03/19/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/19/22	03/19/22	
Ethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/19/22	03/19/22	
Hexachlorobutadiene Hexachlorobutadiene	ND	10.0	2	03/19/22	03/19/22	
2-Hexanone	ND	40.0	2	03/19/22	03/19/22	
	ND ND	2.00	2	03/19/22	03/19/22	
Isopropylbenzene	ND ND	2.00	2	03/19/22	03/19/22	
4-Isopropyltoluene	ND ND	40.0	2	03/19/22	03/19/22	
2-Butanone (MEK)		4.00	2	03/19/22	03/19/22	
Methylene Chloride	ND ND		2	03/19/22	03/19/22	
1-Methylnaphthalene	ND ND	20.0	2	03/19/22	03/19/22	
2-Methylnaphthalene	ND	20.0	۷	03/19/22	03/19/22	

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

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		Reporting	5			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	t: IY		Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/19/22	03/19/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/19/22	03/19/22	
Naphthalene	ND	10.0	2	03/19/22	03/19/22	
n-Propyl Benzene	ND	2.00	2	03/19/22	03/19/22	
Styrene	ND	2.00	2	03/19/22	03/19/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/19/22	03/19/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/19/22	03/19/22	
Tetrachloroethene	ND	2.00	2	03/19/22	03/19/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/19/22	03/19/22	
1,1,1-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
1,1,2-Trichloroethane	ND	2.00	2	03/19/22	03/19/22	
Trichloroethene	ND	2.00	2	03/19/22	03/19/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/19/22	03/19/22	
1,2,3-Trichloropropane	ND	4.00	2	03/19/22	03/19/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/19/22	03/19/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/19/22	03/19/22	
Toluene	ND	2.00	2	03/19/22	03/19/22	
Vinyl chloride	ND	4.00	2	03/19/22	03/19/22	
o-Xylene	ND	2.00	2	03/19/22	03/19/22	
p,m-Xylene	ND	4.00	2	03/19/22	03/19/22	
Total Xylenes	ND	2.00	2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		94.0 %	70-130	03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		105 %	70-130	03/19/22	03/19/22	
Surrogate: Toluene-d8		96.7 %	70-130	03/19/22	03/19/22	

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

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		E203110-07					
Analyte	Result	Reporting Limit	D	ilution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L		Analy	st: RAS		Batch: 2212068
Total Dissolved Solids	455	25.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analy	st: KL		Batch: 2213006
рН @25°C	7.82			1	03/21/22 08:37	03/21/22 10:26	Н5
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analy	st: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	625	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analy	st: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/19/22	03/19/22	
Surrogate: Bromofluorobenzene		94.0 %	70-130		03/19/22	03/19/22	
Surrogate: 1,2-Dichloroethane-d4		105 %	70-130		03/19/22	03/19/22	
Surrogate: Toluene-d8		96.7 %	70-130		03/19/22	03/19/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analy	st: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		83.2 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analy	st: RKS		Batch: 2212087
Arsenic	ND	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

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		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	72.8	1.00	1	03/18/22	03/23/22	
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	10.1	1.00	1	03/18/22	03/23/22	
Potassium	ND	1.00	1	03/18/22	03/23/22	
Sodium	37.1	2.00	1	03/18/22	03/23/22	
Sodium Absorption Ratio (CALC)	1.08		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	1.38	0.250	1	03/19/22	03/19/22	
Chloride	27.9	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 13:54	H1
Nitrate-N	1.69	0.250	1	03/19/22 07:59	03/19/22 13:54	H1
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 13:54	H1
Sulfate	72.8	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	



Newell Law FirmProject Name:W Lovington Strawn U. #8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Prepared: 03/19/22 Analyzed: 03/19/22

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	Notes

	ug L	45.2
Blank (2212089-BLK1)		
Acetone	ND	40.0
Benzene	ND	1.00
Bromobenzene	ND	1.00
Bromochloromethane	ND	1.00
Bromodichloromethane	ND	1.00
Bromoform	ND	1.00
Bromomethane	ND	2.00
n-Butyl Benzene	ND ND	1.00
sec-Butylbenzene	ND ND	1.00
tert-Butylbenzene Carbon Tetrachloride	ND ND	1.00 1.00
Chlorobenzene	ND	1.00
Chloroethane	ND	2.00
Chloroform	ND	5.00
Chloromethane	ND	2.00
2-Chlorotoluene	ND	1.00
4-Chlorotoluene	ND	1.00
Dibromochloromethane	ND	1.00
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.00
1,2-Dibromoethane (EDB)	ND	2.00
Dibromomethane	ND	1.00
1,2-Dichlorobenzene	ND	1.00
1,3-Dichlorobenzene	ND	1.00
1,4-Dichlorobenzene	ND	1.00
Dichlorodifluoromethane (Freon-12)	ND	2.00
1,1-Dichloroethane	ND	1.00
1,2-Dichloroethane	ND	1.00
1,1-Dichloroethene	ND	1.00
cis-1,2-Dichloroethene	ND	1.00
trans-1,2-Dichloroethene	ND	1.00
1,2-Dichloropropane	ND ND	1.00
1,3-Dichloropropane 2,2-Dichloropropane	ND ND	1.00 1.00
1,1-Dichloropropene	ND	1.00
cis-1,3-Dichloropropene	ND	1.00
trans-1,3-Dichloropropene	ND	1.00
Diisopropyl Ether (DIPE)	ND	1.00
Ethylbenzene	ND	1.00
Ethyl tert-Butyl Ether (ETBE)	ND	1.00
Hexachlorobutadiene	ND	5.00
2-Hexanone	ND	20.0
Isopropylbenzene	ND	1.00
4-Isopropyltoluene	ND	1.00
2-Butanone (MEK)	ND	20.0
Methylene Chloride	ND	2.00
1-Methylnaphthalene	ND	10.0
2-Methylnaphthalene	ND	10.0
4-Methyl-2-pentanone (MIBK)	ND ND	20.0
Methyl tert-Butyl Ether (MTBE)	ND ND	1.00
Naphthalene n-Propyl Benzene	ND ND	5.00
Styrene	ND	1.00 1.00
tert-Amyl Methyl ether (TAME)	ND	1.00
1,1,1,2-Tetrachloroethane	ND	1.00
1,1,2,2-Tetrachloroethane	ND	1.00
Tetrachloroethene	ND	1.00
1,2,3-Trichlorobenzene	ND	5.00
1,2,4-Trichlorobenzene	ND	5.00
1,1,1-Trichloroethane	ND	1.00
1,1,2-Trichloroethane	ND	1.00
Trichloroethene	ND	1.00
Trichlorofluoromethane (Freon-11)	ND	2.00
1,2,3-Trichloropropane	ND	2.00
1,2,4-Trimethylbenzene	ND	5.00

Newell Law FirmProject Name:W Lovington Strawn U. #8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

10 W Adams Ave Ste E		Project Number:	20	0046-0001					_
Lovington NM, 88260		Project Manager:	Na Na	atalie Gladden				3	3/24/2022 6:26:08PM
	V	Volatile Organic	c Compo	unds by EP	A 8260I	3			Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	Notes
Blank (2212089-BLK1)							Prepared: 0	3/19/22 An	alyzed: 03/19/22
,3,5-Trimethylbenzene	ND	1.00							
Toluene	ND	1.00							
Vinyl chloride	ND ND	2.00							
o-Xylene o,m-Xylene	ND ND	1.00 2.00							
Otal Xylenes	ND	1.00							
'urrogate: Bromofluorobenzene	9.62		10.0		96.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	10.1		10.0		101	70-130			
'urrogate: Toluene-d8	9.93		10.0		99.3	70-130			
	2.23		10.0		77.5	, 0 130			
LCS (2212089-BS1)			50.0		02.2	70 12C	Prepared: 0	3/19/22 An	alyzed: 03/19/22
Benzene	46.7 45.1	1.00	50.0 50.0		93.3 90.1	70-130 70-130			
Bromochloromethane ert-Butylbenzene	45.1 42.6	1.00 1.00	50.0		90.1 85.2	70-130			
Chlorobenzene	46.9	1.00	50.0		93.7	70-130			
,2-Dibromo-3-chloropropane (DBCP)	38.3	5.00	50.0		76.6	65-135			
,4-Dichlorobenzene	44.0	1.00	50.0		88.0	70-130			
,1-Dichloroethene	44.3	1.00	50.0		88.6	80-120			
,2-Dichloropropane	48.7	1.00	50.0		97.4	80-120			
Diisopropyl Ether (DIPE)	47.0 47.0	1.00	50.0 50.0		94.0 93.9	65-135 80-120			
Ethylbenzene Methylene Chloride	46.2	1.00 2.00	50.0		93.9	70-130			
l-Methyl-2-pentanone (MIBK)	85.5	20.0	100		85.5	50-160			
Methyl tert-Butyl Ether (MTBE)	83.3	1.00	100		83.3	70-130			
-Propyl Benzene	47.3	1.00	50.0		94.6	70-130			
,1,1,2-Tetrachloroethane	43.8	1.00	50.0		87.6	70-130			
Tetrachloroethene	44.4	1.00	50.0		88.7	70-130			
,2,3-Trichlorobenzene ,1,1-Trichloroethane	39.1 40.7	5.00 1.00	50.0 50.0		78.3 81.4	70-140 70-130			
,1,2-Trichloroethane	44.9	1.00	50.0		89.8	70-130			
Crichloroethene	44.5	1.00	50.0		88.9	70-130			
Coluene	46.7	1.00	50.0		93.4	80-120			
Vinyl chloride	54.7	2.00	50.0		109	80-120			
-Xylene	45.5	1.00	50.0		91.0	70-130			
,m-Xylene	90.9	2.00	100		90.9	70-130			
otal Xylenes	136	1.00	150		90.9	70-130			
urrogate: Bromofluorobenzene	10.1					70-130			
Surrogate: 1,2-Dichloroethane-d4	9.99		10.0		99.9 100	70-130			
'urrogate: Toluene-d8	10.0		10.0		100	70-130			
LCS Dup (2212089-BSD1)							*		alyzed: 03/19/22
denzene	51.2	1.00	50.0		102	70-130	9.28	20	
Bromochloromethane ert-Butylbenzene	48.8 47.2	1.00 1.00	50.0 50.0		97.7 94.4	70-130 70-130	8.07 10.2	20 20	
Chlorobenzene	52.1	1.00	50.0		104	70-130	10.6	20	
,2-Dibromo-3-chloropropane (DBCP)	41.6	5.00	50.0		83.2	65-135	8.33	30	
,4-Dichlorobenzene	49.6	1.00	50.0		99.2	70-130	12.0	20	
,1-Dichloroethene	48.9	1.00	50.0		97.9	80-120	9.95	20	
,2-Dichloropropane	53.9	1.00	50.0		108	80-120	10.2	20	
Diisopropyl Ether (DIPE) Ethylbenzene	51.4 52.1	1.00 1.00	50.0 50.0		103 104	65-135 80-120	8.91 10.3	20 20	
Aethylene Chloride	50.5	2.00	50.0		104	70-130	8.92	20	
-Methyl-2-pentanone (MIBK)	91.5	20.0	100		91.5	50-160	6.78	30	
Methyl tert-Butyl Ether (MTBE)	88.9	1.00	100		88.9	70-130	6.56	20	
n-Propyl Benzene	52.6	1.00	50.0		105	70-130	10.7	20	
,1,1,2-Tetrachloroethane	48.8	1.00	50.0		97.7	70-130	10.9	20	
etrachloroethene	49.8	1.00	50.0		99.6	70-130	11.5	20	
,2,3-Trichlorobenzene	43.7	5.00	50.0		87.4 90.9	70-140 70-130	11.0	20	
,1,1-Trichloroethane	45.4 48.9	1.00 1.00	50.0 50.0		90.9 97.8	70-130 70-130	11.0 8.49	20 20	
1,1,2-Trichloroethane	70.7	1.00	50.0		100	70-130	0. 4 7	20	



20

100

70-130

11.9

50.0

1.00

50.1

Trichloroethene

Surrogate: Toluene-d8

QC Summary Data

Newell Law FirmProject Name:W Lovington Strawn U. #8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/24/20226:26:08PM

10 W Adams Ave Ste E Lovington NM, 88260		Project Number Project Manager		0046-0001 atalie Gladden	ı				3/24/2022 6:26:08PM
	Vo	olatile Organi	ic Compo	unds by EP	PA 82601	В			Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	Notes
LCS Dup (2212089-BSD1)]	Prepared: 0	3/19/22 A	nalyzed: 03/19/22
Toluene	52.0	1.00	50.0		104	80-120	10.7	20	
Vinyl chloride	60.2	2.00	50.0		120	80-120	9.59	30	
o-Xylene	50.7	1.00	50.0		101	70-130	10.8	20	
p,m-Xylene	101	2.00	100		101	70-130	10.5	20	
Total Xylenes	152	1.00	150		101	70-130	10.6	20	
Surrogate: Bromofluorobenzene	9.98		10.0		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	9.97		10.0		99.7	70-130			

10.0

102

70-130



10 W Adams Ave Ste E Lovington NM, 88260	Project Number: Project Manager:	20046-0001 Natalie Gladden vimetric by SM2540C	3/24/2022 6:26:08PM
Newell Law Firm	Project Name:	W Lovington Strawn U. #8	Reported:

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limi	
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes
Blank (2212068-BLK1)							Prepared: 0	3/17/22	Analyzed: 03/18/22
Total Dissolved Solids	ND	10.0							
LCS (2212068-BS1)							Prepared: 0	3/17/22	Analyzed: 03/18/22
Total Dissolved Solids	88.0	10.0	100		88.0	55-134			
Duplicate (2212068-DUP1)				Source:	E203079-	01	Prepared: 0	3/17/22	Analyzed: 03/18/22
Total Dissolved Solids	43200	200		42100			2.39	5	
Duplicate (2212068-DUP2)				Source:	E203111-0	07	Prepared: 0	3/17/22	Analyzed: 03/22/22
Total Dissolved Solids	345	10.0		333			3.69	5	



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	Reported:
10 W Adams Ave Ste E	Project Number:	20046-0001	
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

71Ct Chemistry by 7040C/450011 1		Wet	Chemistry	by	9040C/4500H+B
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Analyst: KL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	pH Units	pH Units	pH Units	pH Units	%	%	%	%	Notes

LCS (2213006-BS1)				Prepa	red: 03/21/22	2 Analyzed: 03/21/22	
pН	8.00	8.00	100	98.75-101.25			
Duplicate (2213006-DUP1)		Se	ource: E203111-	•07 Prepa	red: 03/21/22	2 Analyzed: 03/21/22	
рН	7.87	7	.78	1	.15 20)	



Newell Law Firm 10 W Adams Ave Ste E	Project Name: Project Number:	W Lovington Strawn U. #8 20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

Wet Chemistry	by	SM2320B
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Analyst: RAS

Analyte	Result mg/L	Reporting Limit mg/L	Spike Level mg/L	Source Result mg/L	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
LCS (2213016-BS1)									yzed: 03/21/22
Total Alkalinity (as CaCO3 at pH 4.5)	246	10.0	250		98.4	70-130	1	<u> </u>	,
LCS Dup (2213016-BSD1)						1	Prepared: 0	3/21/22 Anal	yzed: 03/21/22
Total Alkalinity (as CaCO3 at pH 4.5)	242	10.0	250		96.8	70-130	1.64	20	



Newell Law Firm 10 W Adams Ave Ste E	Project Name: Project Number:	W Lovington Strawn U. #8 20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

Lovington NM, 88260		Project Manager	r: Na	italie Gladden	1				3/24/2022 0:20:08PM
		Wet Che	mistry by	9050A/251	0B		Analyst: RAS		
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	uS/cm	uS/cm	uS/cm	uS/cm	%	%	%	%	Notes
Blank (2213009-BLK1)							Prepared: 0	3/21/22 A	nalyzed: 03/21/22
Specific Conductance (@ 25 C)	ND	10.0							
LCS (2213009-BS1)							Prepared: 0	3/21/22 A	nalyzed: 03/21/22
Specific Conductance (@ 25 C)	1410	10.0	1410		99.8	98-102			
Duplicate (2213009-DUP1)				Source:	E203110-0	03	Prepared: 0	3/21/22 A	nalyzed: 03/21/22
Specific Conductance (@ 25 C)	616	10.0		616			0.00	20	



Newell Law FirmProject Name:W Lovington Strawn U. #8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/24/2022 6:26:08PM

Nonhalogenate	d Organics	by EPA	8015D -	GRO

Anal	

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes

Blank (2212089-BLK1)						Prepared: 03	3/19/22 Ar	nalyzed: 03/19/22
Gasoline Range Organics (C6-C10)	ND	0.100						
Surrogate: Bromofluorobenzene	0.00962		0.0100	96.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0101		0.0100	101	70-130			
Surrogate: Toluene-d8	0.00993		0.0100	99.3	70-130			
LCS (2212089-BS2)						Prepared: 03	/19/22 Ar	nalyzed: 03/19/22
Gasoline Range Organics (C6-C10)	1.10	0.100	1.00	110	70-130			
Surrogate: Bromofluorobenzene	0.00970		0.0100	97.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.00975		0.0100	97.5	70-130			
Surrogate: Toluene-d8	0.00998		0.0100	99.8	70-130			
LCS Dup (2212089-BSD2)						Prepared: 03	3/19/22 Ar	nalyzed: 03/19/22
Gasoline Range Organics (C6-C10)	1.15	0.100	1.00	115	70-130	4.95	20	
Surrogate: Bromofluorobenzene	0.00983		0.0100	98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.00976		0.0100	97.6	70-130			
Surrogate: Toluene-d8	0.00995		0.0100	99.5	70-130			



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	Reported:
10 W Adams Ave Ste E	Project Number:	20046-0001	-
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

Lovington NM, 88260		Project Manager	r: Na	talie Gladder	1				3/24/2022 6:26:08PM		
	Nonha	Nonhalogenated Organics by EPA 8015D - DRO/ORO							Analyst: JL		
Analyte	Result mg/L	Reporting Limit mg/L	Spike Level mg/L	Source Result mg/L	Rec %	Rec Limits %	RPD %	RPD Limit %			
Blank (2213017-BLK1)							Prepared: 0	3/21/22	Analyzed: 03/22/22		
Diesel Range Organics (C10-C28)	ND	1.00									
Dil Range Organics (C28-C36)	ND	2.00									
Surrogate: n-Nonane	2.65		2.50		106	50-200					
LCS (2213017-BS1)							Prepared: 0	3/21/22	Analyzed: 03/22/22		
Diesel Range Organics (C10-C28)	8.23	1.00	12.5		65.9	36-132					
Surrogate: n-Nonane	2.49		2.50		99.7	50-200					
LCS Dup (2213017-BSD1)							Prepared: 0	3/21/22	Analyzed: 03/22/22		
Diesel Range Organics (C10-C28)	8.60	1.00	12.5		68.8	36-132	4.29	20			
Surrogate: n-Nonane	2.54		2.50		101	50-200					



Newell Law Firm	Project Name:	W Lovington Strawn U. #8	Reported:
10 W Adams Ave Ste E	Project Number:	20046-0001	
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

Lovington NM, 88260		Project Manager:	Na	atalie Gladden				3	3/24/2022 6:26:08PM
		Total M	etals by	EPA 6010C					Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes
Blank (2212087-BLK1)							Prepared: 03	3/19/22 An	alyzed: 03/20/22
Arsenic	ND	0.0200							
Barium	ND	0.250							
Cadmium	ND	0.0100							
Chromium	ND	0.0200							
Lead	ND	0.0100							
Selenium	ND	0.0500							
Silver	ND	0.0100							
LCS (2212087-BS1)							Prepared: 03	3/19/22 An	alyzed: 03/20/22
Arsenic	0.444	0.0200	0.500		88.8	80-120			
Barium	11.4	0.250	12.5		91.0	80-120			
Cadmium	0.236	0.0100	0.250		94.4	80-120			
Chromium	0.939	0.0200	1.00		93.9	80-120			
Lead	0.241	0.0100	0.250		96.2	80-120			
Selenium	1.14	0.0500	1.25		91.2	80-120			
Silver	0.0854	0.0100	0.100		85.4	80-120			
Matrix Spike (2212087-MS1)				Source: E	203093-0	01	Prepared: 03	3/19/22 An	alyzed: 03/20/22
Arsenic	4.36	0.200	5.00	ND	87.2	75-125			
Barium	111	2.50	125	ND	88.6	75-125			
Cadmium	2.23	0.100	2.50	ND	89.3	75-125			
Chromium	8.90	0.200	10.0	ND	89.0	75-125			
Lead	2.28	0.100	2.50	ND	91.4	75-125			
Selenium	11.2	0.500	12.5	ND	89.5	75-125			
Silver	0.815	0.100	1.00	ND	81.5	75-125			
Matrix Spike Dup (2212087-MSD1)				Source: E	203093-0	01	Prepared: 03	3/19/22 An	alyzed: 03/20/22
Arsenic	4.38	0.200	5.00	ND	87.5	75-125	0.389	20	
Barium	110	2.50	125	ND	87.7	75-125	1.09	20	
Cadmium	110	2.50	120	1.12	07.7				
Sadilidii	2.27	0.100	2.50	ND	90.7	75-125	1.51	20	
Chromium									
	2.27	0.100	2.50	ND	90.7	75-125	1.51	20	



Silver

0.828

Sodium

QC Summary Data

Newell Law Firm 10 W Adams Ave Ste E	Project Name: Project Number:	W Lovington Strawn U. #8 20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

Lovington NM, 88260		Project Manager:	N	atalie Gladden					3/24/2022 6:26:08PM
		Dissolved	Metals l	oy EPA 6010)C				Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes
Blank (2212080-BLK1)							Prepared: 0	3/18/22 An	nalyzed: 03/19/22
Calcium	ND	1.00							
fron	ND	2.00							
Magnesium	ND	1.00							
Potassium	ND	1.00							
Sodium	ND	2.00							
LCS (2212080-BS1)							Prepared: 0	3/18/22 An	nalyzed: 03/19/22
Calcium	48.3	1.00	50.0		96.6	80-120			
ron	101	2.00	100		101	80-120			
Magnesium	49.9	1.00	50.0		99.9	80-120			
Potassium	4.68	1.00	5.00		93.6	80-120			
Sodium	17.9	2.00	20.0		89.6	80-120			
Matrix Spike (2212080-MS1)				Source: I	E 203110- 0	03	Prepared: 0	3/18/22 An	nalyzed: 03/19/22
Calcium	91.6	1.00	50.0	48.4	86.4	75-125			
ron	99.6	2.00	100	ND	99.6	75-125			
Magnesium	63.8	1.00	50.0	14.0	99.7	75-125			
Potassium	8.12	1.00	5.00	3.23	97.6	75-125			
Sodium	67.2	2.00	20.0	48.4	93.8	75-125			
Matrix Spike Dup (2212080-MSD1)				Source: I	E 203110- 0	03	Prepared: 0	3/18/22 An	nalyzed: 03/19/22
Calcium	95.1	1.00	50.0	48.4	93.3	75-125	3.74	20	
Iron	100	2.00	100	ND	100	75-125	0.481	20	
Magnesium	63.9	1.00	50.0	14.0	99.9	75-125	0.188	20	
Potassium	8.46	1.00	5.00	3.23	104	75-125	4.12	20	

20.0

48.4

75-125

2.67



Sulfate

QC Summary Data

Newell Law Firm	Project Name:	W Lovington Strawn U. #8	Reported:
10 W Adams Ave Ste E	Project Number:	20046-0001	
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/24/2022 6:26:08PM

Lovington NM, 88260		Project Manager:		atalie Gladden					3/24/2022 6:26:08PM
		Anions l	by EPA 3	300.0/9056A					Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes
Blank (2212086-BLK1)							Prepared: 0	3/19/22 A	.nalyzed: 03/19/22
Fluoride	ND	0.250							
Chloride	ND	2.00							
Nitrite-N	ND	0.250							
Nitrate-N	ND	0.250							
o-Phosphate-P	ND	0.250							
Sulfate	ND	2.00							
LCS (2212086-BS1)							Prepared: 03	3/19/22 A	nalyzed: 03/19/22
Fluoride	2.57	0.250	2.50		103	90-110			
Chloride	24.9	2.00	25.0		99.5	90-110			
Nitrite-N	2.73	0.250	2.50		109	90-110			
Nitrate-N	2.58	0.250	2.50		103	90-110			
o-Phosphate-P	12.4	0.250	12.5		99.1	90-110			
Sulfate	24.9	2.00	25.0		99.5	90-110			
LCS Dup (2212086-BSD1)							Prepared: 0	3/19/22 A	nalyzed: 03/19/22
Fluoride	2.56	0.250	2.50		102	90-110	0.312	20	
Chloride	24.8	2.00	25.0		99.0	90-110	0.552	20	
Nitrite-N	2.54	0.250	2.50		102	90-110	6.95	20	
Nitrate-N	2.58	0.250	2.50		103	90-110	0.271	20	
o-Phosphate-P	12.3	0.250	12.5		98.7	90-110	0.404	20	
a 10 -	24.7		25.0		00.0	00.110	0.524	20	

25.0

2.00

90-110

98.9

0.524

20



Newell Law Firm	Project Name:	W	V Lovington St	trawn U. #8		Reported:					
10 W Adams Ave Ste E		Project Number:	20	0046-0001				-			
Lovington NM, 88260		Project Manager	Project Manager: Natalie Gladden						3/24/2022 6:26:08PM		
		Total Mo	ercury by	y EPA 7470	A				Analyst: RKS		
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit			
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	Notes		
Blank (2212088-BLK1)							Prepared: 0	3/19/22	Analyzed: 03/20/22		
Mercury	ND	0.200									
LCS (2212088-BS1)							Prepared: 0	3/19/22	Analyzed: 03/20/22		
Mercury	1.82	0.200	2.00		91.2	80-120					
Matrix Spike (2212088-MS1)				Source:	E203110-0	2	Prepared: 0	3/19/22	Analyzed: 03/20/22		
Mercury	1.77	0.200	2.00	ND	88.7	75-125					
Matrix Spike Dup (2212088-MSD1)				Source:	E203110-0	2	Prepared: 0	3/19/22	Analyzed: 03/20/22		
Mercury	1.76	0.200	2.00	ND	88.2	75-125	0.578	20			

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

ſ	Newell Law Firm	Project Name:	W Lovington Strawn U. #8	
١	10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
l	Lovington NM, 88260	Project Manager:	Natalie Gladden	03/24/22 18:26

C1	The CV recovery was	above method	l acceptance limits.
----	---------------------	--------------	----------------------

C4 The CV recovery was below method acceptance limits.

C6 The CV recovery was outside acceptance limits. The sample was analyzed multiple times all with similar bracketing CV results.

H1 Sample was received past holding time and analyzed per client request.

H5 pH is specified to be performed in the field within 15 minutes of sampling. The sample was performed as quickly as possible.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



lient: N	lemel	1 / (1)	Fire	n		Bill To	0			ala.	La	b Us	e On	ly					TA	Т	EPA P	rogram
roject: W Lavington Strawn U. #8 Attention: ESS							_	Lab Wolf					CWA	SDWA								
roject M	anager:	Mike	News	2))	Ac	dress: 2427 W	Country		Eá	203	3110				-000			\times				
Address:						y, State, Zip Hobbs	, NM							sis a	nd Met	thod						RCRA
ity, State	e, Zip				Ph	one:							AS									
hone:					<u>En</u>	nail:			015	8015			3		7						State	
mail:								by 8	by 8	121	09	01	0.00	A		Σ	X		NM CO	UT AZ	TX	
eport du	ie by:								ORO	ORO	by 80	y 82	s 60:	de 3	-					X.		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			N	Lab lumber	DRO/ORO by 8015	GRO/DRO by	ВТЕХ by 8021	VOC by 8260	. Metals 6010 RCRA 8	Chloride 300.0	S		BGDOC	верос			Remarks	¢
9:53	3/15	A	-1-	MW	-95							X	X		X		X					
10:46	1	,	1	WW	-9M			2				1	1		1							
11:51		/		MW	- 9D		7.4	3				1					1			4		
14:15				MW	- 1			4														
14:53		1		MW	-5			5			4						5					
15:40	1			MW	-6			Le				1)					ė-
16:33	/	1		MW	-3		113	7					1				5					
	5		1												,)					
							}					1										
		(1									1				(7					
Addition	al Instru	ctions:																				
365.00					mple. I am awa	e that tampering with or intenti	Waidly mislabelling t	the sample	e locati	ion,			100							eived on ice the day °C on subsequent d		ed or received
Relinguish	ed by: (Sign	THE STATE OF A CO.	Dat		Time	Received by: (Signature)	. / Da	ate 3.17.	22	Time	44.	5	Rec	eive	d on ic	·e'		ab Us	se Onl	У		
Relinquish		nature)	Dat		Time 1730	Received by: (Signature)	Di	ate 3/18/	1	Time			T1							T3		
Relinquished by: (Signature) Date Time Received by: (Signature) Date						-																
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other Containe							tainer Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA															
10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	Control Control Control					ther arrangements are made							_				_			eport for the an	alysis of the	above
In the Contract Charles of the						with this COC. The liability of											100			A Constitution of		

Printed: 3/24/2022 6:09:32PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Newell Law Firm	Date Received:	03/18/22	08:15	Work Order 1	D: E203	110
Phone:	(575) 739-6395	Date Logged In:	03/17/22	17:38	Logged In By	r: Caitli	in Christian
Email:	natalie@energystaffingllc.com	Due Date:	03/24/22	17:00 (4 day TAT)			
1. Does th 2. Does th 3. Were sa 4. Was the	Custody (COC) The sample ID match the COC? The number of samples per sampling site location matched amples dropped off by client or carrier? The COC complete, i.e., signatures, dates/times, request ll samples received within holding time? Note: Analysis, such as pH which should be conducted in	sted analyses?	Yes Yes Yes Yes	Carrier: <u>C</u>			
Samnle T	i.e, 15 minute hold time, are not included in this disucssicurn Around Time (TAT)	on.		[Comr	1ents/Reso	<u>llution</u>
	COC indicate standard TAT, or Expedited TAT?		Yes		Samples recieved ex	-	· ·
Sample C 7. Was a s	Cooler cample cooler received?		Yes		Nitrate and O-Phosp unable to be analyze		-
8. If yes,	was cooler received in good condition?		Yes		-03,-04,-05,-06 and -		-
9. Was the	e sample(s) received intact, i.e., not broken?		Yes			o r uue	to msumerem
10. Were	custody/security seals present?		No		sample amount.		
	were custody/security seals intact?		NA				
12. Was th	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes				
Sample C			_				
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
17. Was a	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers'	?	Yes				
19. Is the a	appropriate volume/weight or number of sample contain	ners collected?	Yes				
Sa D	oel field sample labels filled out with the minimum info ample ID? ate/Time Collected? ollectors name?	rmation:	Yes No				
_	reservation		No				
	the COC or field labels indicate the samples were pr	eserved?	Yes				
	imple(s) correctly preserved?		Yes				
	filteration required and/or requested for dissolved m	netals?	Yes				
Multipha	se Sample Matrix						
-	the sample have more than one phase, i.e., multipha	se?	No				
	does the COC specify which phase(s) is to be analy		NA				
Subcontr	act Laboratory Imples required to get sent to a subcontract laborator		No				
29. Was a	subcontract laboratory specified by the client and if	so who?	NA	Subcontract Lab	: na		
Client Ir	<u>istruction</u>						
Signat	ure of client authorizing changes to the COC or sample dis	position.			Date	_ (envirotech Inc.

Signature of client authorizing changes to the COC or sample disposition.

Released to Imaging: 2/21/2025 11:17:21 AM

Report to:

Natalie Gladden



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Newell Law Firm

Project Name: West Lovington Strawn Unit 8

Work Order: E203111

Job Number: 20046-0001

Received: 3/18/2022

Revision: 2

Report Reviewed By:

Walter Hinchman Laboratory Director 3/25/22

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 3/25/22

Natalie Gladden 10 W Adams Ave Ste E Lovington, NM 88260

Project Name: West Lovington Strawn Unit 8

Workorder: E203111

Date Received: 3/18/2022 8:15:00AM

Natalie Gladden,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/18/2022 8:15:00AM, under the Project Name: West Lovington Strawn Unit 8.

The analytical test results summarized in this report with the Project Name: West Lovington Strawn Unit 8 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881

Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

Alexa Michaels

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services

Office: 505-421-LABS(5227)

Cell: 505-320-4759

ljarboe@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative

Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	Donoutoda
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	03/25/22 16:10

Lab Sample ID	Matrix	Sampled	Received	Container
E203111-01A	Aqueous	03/16/22	03/18/22	Poly 500mL
E203111-01B	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-01C	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-01D	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-02A	Aqueous	03/16/22	03/18/22	Poly 250mL
E203111-02B	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-02C	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-03A	Aqueous	03/16/22	03/18/22	Poly 250mL
E203111-03B	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-03C	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-04A	Aqueous	03/16/22	03/18/22	Poly 250mL
E203111-04B	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-04C	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-05A	Aqueous	03/16/22	03/18/22	Poly 250mL
E203111-05B	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-05C	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-06A	Aqueous	03/16/22	03/18/22	Poly 250mL
E203111-06B	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-06C	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-07A	Aqueous	03/16/22	03/18/22	Poly 500mL
E203111-07B	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-07C	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
E203111-07D	Aqueous	03/16/22	03/18/22	VOA Vial, 40mL; HCl
	E203111-01A E203111-01B E203111-01C E203111-01D E203111-02A E203111-02B E203111-02C E203111-03A E203111-03A E203111-03C E203111-04A E203111-04B E203111-04B E203111-05A E203111-05A E203111-05B E203111-06A E203111-06C E203111-06B E203111-07A E203111-07B E203111-07B	E203111-01A Aqueous E203111-01B Aqueous E203111-01C Aqueous E203111-01D Aqueous E203111-02A Aqueous E203111-02B Aqueous E203111-02C Aqueous E203111-03A Aqueous E203111-03A Aqueous E203111-03B Aqueous E203111-04A Aqueous E203111-04A Aqueous E203111-04B Aqueous E203111-05A Aqueous E203111-05A Aqueous E203111-05B Aqueous E203111-05C Aqueous E203111-06A Aqueous E203111-06B Aqueous E203111-06B Aqueous E203111-07A Aqueous E203111-07A Aqueous E203111-07B Aqueous E203111-07B Aqueous E203111-07B Aqueous	E203111-01A Aqueous 03/16/22 E203111-01B Aqueous 03/16/22 E203111-01C Aqueous 03/16/22 E203111-01D Aqueous 03/16/22 E203111-02A Aqueous 03/16/22 E203111-02B Aqueous 03/16/22 E203111-02C Aqueous 03/16/22 E203111-03A Aqueous 03/16/22 E203111-03B Aqueous 03/16/22 E203111-03C Aqueous 03/16/22 E203111-04A Aqueous 03/16/22 E203111-04B Aqueous 03/16/22 E203111-04C Aqueous 03/16/22 E203111-05A Aqueous 03/16/22 E203111-05B Aqueous 03/16/22 E203111-05C Aqueous 03/16/22 E203111-06A Aqueous 03/16/22 E203111-06A Aqueous 03/16/22 E203111-06B Aqueous 03/16/22 E203111-06B Aqueous 03/16/22 E203111-07A Aqueous 03/16/22 E203111-07A Aqueous 03/16/22 E203111-07B Aqueous 03/16/22 E203111-07B Aqueous 03/16/22 E203111-07B Aqueous 03/16/22 E203111-07B Aqueous 03/16/22 E203111-07C Aqueous 03/16/22	E203111-01A Aqueous 03/16/22 03/18/22 E203111-01B Aqueous 03/16/22 03/18/22 E203111-01C Aqueous 03/16/22 03/18/22 E203111-01D Aqueous 03/16/22 03/18/22 E203111-02A Aqueous 03/16/22 03/18/22 E203111-02B Aqueous 03/16/22 03/18/22 E203111-02C Aqueous 03/16/22 03/18/22 E203111-03A Aqueous 03/16/22 03/18/22 E203111-03B Aqueous 03/16/22 03/18/22 E203111-03C Aqueous 03/16/22 03/18/22 E203111-04A Aqueous 03/16/22 03/18/22 E203111-04A Aqueous 03/16/22 03/18/22 E203111-04B Aqueous 03/16/22 03/18/22 E203111-05A Aqueous 03/16/22 03/18/22 E203111-05B Aqueous 03/16/22 03/18/22 E203111-05C Aqueous 03/16/22 03/18/22 E203111-06A Aqueous 03/16/22 03/18/22 E203111-06B Aqueous 03/16/22 03/18/22 E203111-06C Aqueous 03/16/22 03/18/22 E203111-07A Aqueous 03/16/22 03/18/22 E203111-07A Aqueous 03/16/22 03/18/22 E203111-07B Aqueous 03/16/22 03/18/22 E203111-07B Aqueous 03/16/22 03/18/22 E203111-07B Aqueous 03/16/22 03/18/22 E203111-07B Aqueous 03/16/22 03/18/22 E203111-07B Aqueous 03/16/22 03/18/22



Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

MW - 2 E203111-01

Reporting							
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes	
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:	IY		Batch: 2212089	
Acetone	ND	80.0	2	03/21/22	03/21/22		
Benzene	ND	2.00	2	03/21/22	03/21/22		
Bromobenzene	ND	2.00	2	03/21/22	03/21/22		
Bromochloromethane	ND	2.00	2	03/21/22	03/21/22		
Bromodichloromethane	ND	2.00	2	03/21/22	03/21/22		
Bromoform	ND	2.00	2	03/21/22	03/21/22		
Bromomethane	ND	4.00	2	03/21/22	03/21/22		
n-Butyl Benzene	ND	2.00	2	03/21/22	03/21/22		
sec-Butylbenzene	ND	2.00	2	03/21/22	03/21/22		
ert-Butylbenzene	ND	2.00	2	03/21/22	03/21/22		
Carbon Tetrachloride	ND	2.00	2	03/21/22	03/21/22		
Chlorobenzene	ND	2.00	2	03/21/22	03/21/22		
Chloroethane	ND	4.00	2	03/21/22	03/21/22		
Chloroform	ND	10.0	2	03/21/22	03/21/22		
Chloromethane	ND	4.00	2	03/21/22	03/21/22		
2-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22		
1-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22		
Dibromochloromethane	ND	2.00	2	03/21/22	03/21/22		
,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/21/22	03/21/22		
,2-Dibromoethane (EDB)	ND	4.00	2	03/21/22	03/21/22		
Dibromomethane	ND	2.00	2	03/21/22	03/21/22		
,2-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22		
,3-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22		
,4-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22		
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/21/22	03/21/22		
1,1-Dichloroethane	ND	2.00	2	03/21/22	03/21/22		
,2-Dichloroethane	ND	2.00	2	03/21/22	03/21/22		
,1-Dichloroethene	ND	2.00	2	03/21/22	03/21/22		
sis-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22		
rans-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22		
,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22		
1,3-Dichloropropane	ND	2.00	2	03/21/22	03/21/22		
2,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22		
1,1-Dichloropropene	ND	2.00	2	03/21/22	03/21/22		
cis-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22		
rans-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22		
Diisopropyl Ether (DIPE)	ND	2.00	2	03/21/22	03/21/22		
Ethylbenzene	ND	2.00	2	03/21/22	03/21/22		
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/21/22	03/21/22		
Hexachlorobutadiene	ND	10.0	2	03/21/22	03/21/22		
2-Hexanone	ND	40.0	2	03/21/22	03/21/22		
sopropylbenzene	ND	2.00	2	03/21/22	03/21/22		
l-Isopropyltoluene	ND	2.00	2	03/21/22	03/21/22		
2-Butanone (MEK)	ND	40.0	2	03/21/22	03/21/22		
Methylene Chloride	ND	4.00	2	03/21/22	03/21/22		

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

MW - 2 E203111-01

	Reporting	g			
Analyte Resul	lt Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B ug/L	ug/L	Analy	yst: IY		Batch: 2212089
1-Methylnaphthalene ND	20.0	2	03/21/22	03/21/22	
2-Methylnaphthalene ND	20.0	2	03/21/22	03/21/22	
4-Methyl-2-pentanone (MIBK)	40.0	2	03/21/22	03/21/22	
Methyl tert-Butyl Ether (MTBE)	2.00	2	03/21/22	03/21/22	
Naphthalene ND	10.0	2	03/21/22	03/21/22	
n-Propyl Benzene ND	2.00	2	03/21/22	03/21/22	
Styrene ND	2.00	2	03/21/22	03/21/22	
tert-Amyl Methyl ether (TAME) ND	2.00	2	03/21/22	03/21/22	
1,1,1,2-Tetrachloroethane ND	2.00	2	03/21/22	03/21/22	
1,1,2,2-Tetrachloroethane ND	2.00	2	03/21/22	03/21/22	
Tetrachloroethene ND	2.00	2	03/21/22	03/21/22	
1,2,3-Trichlorobenzene ND	10.0	2	03/21/22	03/21/22	
1,2,4-Trichlorobenzene ND	10.0	2	03/21/22	03/21/22	
1,1,1-Trichloroethane ND	2.00	2	03/21/22	03/21/22	
1,1,2-Trichloroethane ND	2.00	2	03/21/22	03/21/22	
Trichloroethene ND	2.00	2	03/21/22	03/21/22	
Trichlorofluoromethane (Freon-11) ND	4.00	2	03/21/22	03/21/22	
1,2,3-Trichloropropane ND	4.00	2	03/21/22	03/21/22	
1,2,4-Trimethylbenzene ND	10.0	2	03/21/22	03/21/22	
1,3,5-Trimethylbenzene ND	2.00	2	03/21/22	03/21/22	
Toluene ND	2.00	2	03/21/22	03/21/22	
Vinyl chloride ND	4.00	2	03/21/22	03/21/22	
o-Xylene ND	2.00	2	03/21/22	03/21/22	
p,m-Xylene ND	4.00	2	03/21/22	03/21/22	
Total Xylenes ND	2.00	2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene	96.3 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4	98.1 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8	97.0 %	70-130	03/21/22	03/21/22	



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

MW - 2

		2200111 01					
Analyte	Result	Reporting Limit	Di	ilution	Prepared	Analyzed	Notes
· ·	mg/L	mg/L			t: RAS	111111,200	Batch: 2212068
Wet Chem/Gravimetric by SM2540C Total Dissolved Solids	2490	25.0		1	03/17/22	03/22/22	Dateii. 2212006
Total Dissolved Solids	2490	25.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analys	t: KL		Batch: 2213006
pH @25°C	7.67			1	03/21/22 08:37	03/21/22 10:26	Н5
Wet Chemistry by SM2320B	mg/L	mg/L		Analys	t: RAS		Batch: 2213016
Total Alkalinity (as CaCO3 at pH 4.5)	568	10.0		1	03/21/22	03/21/22	
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analys	t: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	4600	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analys	t: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		96.3 %	70-130		03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		98.1 %	70-130		03/21/22	03/21/22	
Surrogate: Toluene-d8		97.0 %	70-130		03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analys	t: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		100 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analys	t: RKS		Batch: 2212087
Arsenic	ND	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

MW - 2 E203111-01

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	137	1.00	1	03/18/22	03/23/22	
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	18.5	1.00	1	03/18/22	03/23/22	
Potassium	4.31	1.00	1	03/18/22	03/23/22	C1, C6
Sodium	827	20.0	10	03/18/22	03/23/22	C4, C6
Sodium Absorption Ratio (CALC)	17.6		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analyst: RAS			Batch: 2212086
Fluoride	ND	5.00	20	03/19/22	03/19/22	
Chloride	1350	40.0	20	03/19/22	03/19/22	
Nitrite-N	ND	5.00	20	03/19/22 07:59	03/19/22 14:15	H2
Nitrate-N	ND	5.00	20	03/19/22 07:59	03/19/22 14:15	H2
o-Phosphate-P	ND	5.00	20	03/19/22 07:59	03/19/22 14:15	H2
Sulfate	200	40.0	20	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	_
*						



Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

MW - 4 E203111-02

		E203111-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst	: IY		Batch: 2212089
Acetone	ND	80.0	2	03/21/22	03/21/22	
Benzene	ND	2.00	2	03/21/22	03/21/22	
Bromobenzene	ND	2.00	2	03/21/22	03/21/22	
Bromochloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromodichloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromoform	ND	2.00	2	03/21/22	03/21/22	
Bromomethane	ND	4.00	2	03/21/22	03/21/22	
n-Butyl Benzene	ND	2.00	2	03/21/22	03/21/22	
sec-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
ert-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
Carbon Tetrachloride	ND	2.00	2	03/21/22	03/21/22	
Chlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Chloroethane	ND	4.00	2	03/21/22	03/21/22	
Chloroform	ND	10.0	2	03/21/22	03/21/22	
Chloromethane	ND	4.00	2	03/21/22	03/21/22	
2-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
1-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
Dibromochloromethane	ND	2.00	2	03/21/22	03/21/22	
,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/21/22	03/21/22	
,2-Dibromoethane (EDB)	ND	4.00	2	03/21/22	03/21/22	
Dibromomethane	ND	2.00	2	03/21/22	03/21/22	
,2-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
,3-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,4-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/21/22	03/21/22	
1,1-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
	ND ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloroethene	ND ND	2.00	2	03/21/22	03/21/22	
cis-1,2-Dichloroethene			2	03/21/22	03/21/22	
rans-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloropropane	ND	2.00				
1,3-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
2,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
cis-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
rans-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/21/22	03/21/22	
Ethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/21/22	03/21/22	
Hexachlorobutadiene	ND	10.0	2	03/21/22	03/21/22	
2-Hexanone	ND	40.0	2	03/21/22	03/21/22	
sopropylbenzene	ND	2.00	2	03/21/22	03/21/22	
1-Isopropyltoluene	ND	2.00	2	03/21/22	03/21/22	
2-Butanone (MEK)	ND	40.0	2	03/21/22	03/21/22	
Methylene Chloride	ND	4.00	2	03/21/22	03/21/22	
1-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	
2-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

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Methyl-2-pentanone (MIBK)	Austra	D 1	Reporting		D	A a la	Notes
Methyl tert-Butyl Ether (MTBE)	Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Machy terr-Buty Ether (MTBE) ND 2.00 2 03/21/22 03/2	Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	t: IY		Batch: 2212089
daphthalene ND 10.0 2 03/21/22 03/21/22 03/21/22 -Propyl Benzene ND 2.00 2 03/21/22	4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/21/22	03/21/22	
Propyl Benzene ND 2.00 2 03/21/22	Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/21/22	03/21/22	
ND 2.00 2 03/21/22 03/2	Naphthalene	ND	10.0	2	03/21/22	03/21/22	
richloroethane (Freon-11) ND 2.00 2 03/21/22 03/21/22 Trichloroethane (Freon-11) ND 2.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 2.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 2.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) Trichloropropane (Preon-11) Trichloropropane (Preon-11) ND 4.00 2 03/21/22 03/21/22 Trichloropropane (Preon-11) Trich	n-Propyl Benzene	ND	2.00	2	03/21/22	03/21/22	
1,1,2,-Tetrachloroethane	Styrene	ND	2.00	2	03/21/22	03/21/22	
1,1,2,2-Tetrachloroethane	tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/21/22	03/21/22	
Settachloroethane	1,1,1,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
2,2,3-Trichlorobenzene ND 10.0 2 03/21/22 0	1,1,2,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
ND 10.0 2 03/21/22 03/2	Tetrachloroethene	ND	2.00	2	03/21/22	03/21/22	
ND 2.00 2 03/21/22 03/2	1,2,3-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
ND 2.00 2 03/21/22 03/2	1,2,4-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
Prichloroethane (Freon-11) ND 2.00 2 03/21/22 03	1,1,1-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
Prichlorofluoromethane (Freon-11) ND 4.00 2 03/21/22	1,1,2-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
ND	Trichloroethene	ND	2.00	2	03/21/22	03/21/22	
ND 10.0 2 03/21/22 03/2	Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/21/22	03/21/22	
ND 2.00 2 03/21/22 03/2	1,2,3-Trichloropropane	ND	4.00	2	03/21/22	03/21/22	
Foluene ND 2.00 2 03/21/22 03/21/22 Vinyl chloride ND 4.00 2 03/21/22 03/21	1,2,4-Trimethylbenzene	ND	10.0	2	03/21/22	03/21/22	
Order Conduction ND 4.00 2 03/21/22 03/21/22 Vinyl chloride ND 4.00 2 03/21/22 03/21/22 v-Xylene ND 4.00 2 03/21/22 03/21/22 vmrxylene ND 4.00 2 03/21/22 03/21/22 votal Xylenes ND 2.00 2 03/21/22 03/21/22 vurrogate: Bromofluorobenzene 94.9 % 70-130 03/21/22 03/21/22 vurrogate: 1,2-Dichloroethane-d4 102 % 70-130 03/21/22 03/21/22	1,3,5-Trimethylbenzene	ND	2.00	2	03/21/22	03/21/22	
-Xylene ND 2.00 2 03/21/22 03/	Toluene	ND	2.00	2	03/21/22	03/21/22	
ND 4.00 2 03/21/22 03/2	Vinyl chloride	ND	4.00	2	03/21/22	03/21/22	
Footal Xylenes ND 2.00 2 03/21/22 03/21/22 ourrogate: Bromofluorobenzene 94.9 % 70-130 03/21/22 03/21/22 ourrogate: 1,2-Dichloroethane-d4 102 % 70-130 03/21/22 03/21/22	o-Xylene	ND	2.00	2	03/21/22	03/21/22	
turrogate: I,2-Dichloroethane-d4 102 % 70-130 03/21/22 03/21/22 03/21/22	p,m-Xylene	ND	4.00	2	03/21/22	03/21/22	
urrogate: 1,2-Dichloroethane-d4 102 % 70-130 03/21/22 03/21/22	Total Xylenes	ND	2.00	2	03/21/22	03/21/22	
102/0 /0150	Surrogate: Bromofluorobenzene		94.9 %	70-130	03/21/22	03/21/22	
urrogate: Toluene-d8 97.3 % 70-130 03/21/22 03/21/22	Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	03/21/22	03/21/22	
	Surrogate: Toluene-d8		97.3 %	70-130	03/21/22	03/21/22	

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10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
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	D 1	Reporting	F.''		D 1		27.
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L		Analyst	:: RAS		Batch: 2212068
Total Dissolved Solids	830	25.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analyst	:: KL		Batch: 2213006
pH @25°C	7.64			1	03/21/22 08:37	03/21/22 10:26	H5
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analyst	:: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	1620	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analyst	:: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		94.9 %	70-130		03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130		03/21/22	03/21/22	
Surrogate: Toluene-d8		97.3 %	70-130		03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analyst	:: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		107 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analyst	:: RKS		Batch: 2212087
Arsenic	ND	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

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Result mg/L 171	Limit mg/L	Dilution	Prepared	Analyzed	Notes
	mg/L				
171		Analys	st: RKS		Batch: 2212080
1/1	1.00	1	03/18/22	03/23/22	C4, C6
ND	2.00	1	03/18/22	03/23/22	
21.6	1.00	1	03/18/22	03/23/22	
2.71	1.00	1	03/18/22	03/23/22	C1, C6
132	2.00	1	03/18/22	03/23/22	C4, C6
2.53		1	03/24/22	03/24/22	
mg/L	mg/L	Analys	st: RAS		Batch: 2212086
0.720	0.500	2	03/19/22	03/19/22	
260	4.00	2	03/19/22	03/19/22	
ND	0.500	2	03/19/22 07:59	03/19/22 14:37	H2
6.20	0.500	2	03/19/22 07:59	03/19/22 14:37	H2
ND	0.500	2	03/19/22 07:59	03/19/22 14:37	H2
119	4.00	2	03/19/22	03/19/22	
ug/L	ug/L	Analys	st: RKS		Batch: 2212088
ND	0.200	1	03/19/22	03/20/22	
	21.6 2.71 132 2.53 mg/L 0.720 260 ND 6.20 ND 119 ug/L	21.6 1.00 2.71 1.00 132 2.00 2.53 mg/L mg/L 0.720 0.500 260 4.00 ND 0.500 6.20 0.500 ND 0.500 119 4.00 ug/L ug/L	21.6 1.00 1 2.71 1.00 1 132 2.00 1 2.53 1 mg/L mg/L Analys 0.720 0.500 2 260 4.00 2 ND 0.500 2 6.20 0.500 2 ND 0.500 2 ND 0.500 2 119 4.00 2 ug/L ug/L Analys	21.6 1.00 1 03/18/22 2.71 1.00 1 03/18/22 132 2.00 1 03/18/22 2.53 1 03/24/22 mg/L mg/L Analyst: RAS 0.720 0.500 2 03/19/22 260 4.00 2 03/19/22 07:59 ND 0.500 2 03/19/22 07:59 ND 0.500 2 03/19/22 07:59 ND 0.500 2 03/19/22 07:59 ND 0.500 2 03/19/22 07:59 ND 0.500 2 03/19/22 07:59 ND 0.500 2 03/19/22 07:59 ND 0.500 2 03/19/22 07:59 Analyst: RKS	21.6 1.00 1 03/18/22 03/23/22 2.71 1.00 1 03/18/22 03/23/22 132 2.00 1 03/18/22 03/23/22 2.53 1 03/24/22 03/24/22 mg/L mg/L Analyst: RAS 0.720 0.500 2 03/19/22



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Racult	Reporting	Dilution	Prepared	Analwzad	Notes			
			•	Analyzeu				
		-		02/21/22	Batch: 2212089			
	2.00							
	10.0							
ND	4.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	4.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	10.0	2	03/21/22	03/21/22				
ND	40.0	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	2.00	2	03/21/22	03/21/22				
ND	40.0	2	03/21/22	03/21/22				
		2	03/21/22	03/21/22				
ND	20.0	2	03/21/22	03/21/22				
	Result ug/L ND ND ND ND ND ND ND ND ND N	Result Limit	Result Limit Dilution ug/L ug/L Analyst: ND 80.0 2 ND 2.00 2 ND 4.00 2 ND 4.00 2 ND 4.00 2 ND 2.00 2 ND	Result Limit Dilution Prepared ug/L ug/L Analyst: IY ND 80.0 2 03/21/22 ND 2.00 2 03/21/22 ND 4.00 2 03/21/22 ND 4.00 2 03/21/22 ND 2.00 2 03/21/22 ND	Result Limit Dilution Prepared Analyzed			

Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

		Reportin	g			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	t: IY		Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/21/22	03/21/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/21/22	03/21/22	
Naphthalene	ND	10.0	2	03/21/22	03/21/22	
n-Propyl Benzene	ND	2.00	2	03/21/22	03/21/22	
Styrene	ND	2.00	2	03/21/22	03/21/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/21/22	03/21/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
Tetrachloroethene	ND	2.00	2	03/21/22	03/21/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,1,1-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
Trichloroethene	ND	2.00	2	03/21/22	03/21/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/21/22	03/21/22	
1,2,3-Trichloropropane	ND	4.00	2	03/21/22	03/21/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/21/22	03/21/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Toluene	ND	2.00	2	03/21/22	03/21/22	
Vinyl chloride	ND	4.00	2	03/21/22	03/21/22	
o-Xylene	ND	2.00	2	03/21/22	03/21/22	
p,m-Xylene	ND	4.00	2	03/21/22	03/21/22	
Total Xylenes	ND	2.00	2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		94.9 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8		96.7 %	70-130	03/21/22	03/21/22	

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

		E203111-03					
		Reporting					
Analyte	Result	Limit	Di	ilution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L		Analys	t: RAS		Batch: 2212068
Total Dissolved Solids	908	25.0		1	03/17/22	03/22/22	
Wet Chemistry by 9040C/4500H+B	pH Units	pH Units		Analys	t: KL		Batch: 2213006
pH @25°C	7.90			1	03/21/22 08:37	03/21/22 10:26	Н5
Wet Chemistry by 9050A/2510B	uS/cm	uS/cm		Analys	t: RAS		Batch: 2213009
Specific Conductance (@ 25 C)	613	10.0		1	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L		Analys	t: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200		2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		94.9 %	70-130		03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130		03/21/22	03/21/22	
Surrogate: Toluene-d8		96.7 %	70-130		03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L		Analys	t: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00		1	03/21/22	03/21/22	
Oil Range Organics (C28-C36)	ND	2.00		1	03/21/22	03/21/22	
Surrogate: n-Nonane		103 %	50-200		03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L		Analys	t: RKS		Batch: 2212087
Arsenic	ND	0.0200		1	03/19/22	03/20/22	
Barium	ND	0.250		1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100		1	03/19/22	03/20/22	
Chromium	ND	0.0200		1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100		1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500		1	03/19/22	03/20/22	
Silver	ND	0.0100		1	03/19/22	03/20/22	



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	68.9	1.00	1	03/18/22	03/23/22	C4, C6
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	10.5	1.00	1	03/18/22	03/23/22	
Potassium	2.33	1.00	1	03/18/22	03/23/22	C1, C6
Sodium	41.0	2.00	1	03/18/22	03/23/22	C4, C6
Sodium Absorption Ratio (CALC)	1.22		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	1.15	0.250	1	03/19/22	03/19/22	
Chloride	22.8	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 14:59	H2
Nitrate-N	0.472	0.250	1	03/19/22 07:59	03/19/22 14:59	H2
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 14:59	H2
Sulfate	52.4	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	
1,101041	1.2	2.200				

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		2203111-04				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Analyte				•	Allalyzeu	
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:		02/21/22	Batch: 2212089
Acetone	ND	80.0	2	03/21/22	03/21/22	
Benzene	ND	2.00	2	03/21/22	03/21/22	
Bromobenzene	ND	2.00	2	03/21/22	03/21/22	
Bromochloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromodichloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromoform	ND	2.00	2	03/21/22	03/21/22	
Bromomethane	ND	4.00	2	03/21/22	03/21/22	
n-Butyl Benzene	ND	2.00	2	03/21/22	03/21/22	
sec-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
tert-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
Carbon Tetrachloride	ND	2.00	2	03/21/22	03/21/22	
Chlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Chloroethane	ND	4.00	2	03/21/22	03/21/22	
Chloroform	ND	10.0	2	03/21/22	03/21/22	
Chloromethane	ND	4.00	2	03/21/22	03/21/22	
2-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
4-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
Dibromochloromethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/21/22	03/21/22	
1,2-Dibromoethane (EDB)	ND	4.00	2	03/21/22	03/21/22	
Dibromomethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,3-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,4-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/21/22	03/21/22	
1,1-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
cis-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
trans-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
1,3-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
2,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
cis-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
trans-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/21/22	03/21/22	
Ethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Ethyloenzene Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/21/22	03/21/22	
• • •	ND ND	10.0	2	03/21/22	03/21/22	
Hexachlorobutadiene	ND ND	40.0	2	03/21/22	03/21/22	
2-Hexanone			2	03/21/22	03/21/22	
Isopropylbenzene	ND	2.00				
4-Isopropyltoluene	ND	2.00	2	03/21/22	03/21/22	
2-Butanone (MEK)	ND	40.0	2	03/21/22	03/21/22	
Methylene Chloride	ND	4.00	2	03/21/22	03/21/22	
1-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	
2-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	

Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

Reporting						
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analy	st: IY	<u> </u>	Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/21/22	03/21/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/21/22	03/21/22	
Naphthalene	ND	10.0	2	03/21/22	03/21/22	
n-Propyl Benzene	ND	2.00	2	03/21/22	03/21/22	
Styrene	ND	2.00	2	03/21/22	03/21/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/21/22	03/21/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
Tetrachloroethene	ND	2.00	2	03/21/22	03/21/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,1,1-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
Trichloroethene	ND	2.00	2	03/21/22	03/21/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/21/22	03/21/22	
1,2,3-Trichloropropane	ND	4.00	2	03/21/22	03/21/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/21/22	03/21/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Toluene	ND	2.00	2	03/21/22	03/21/22	
Vinyl chloride	ND	4.00	2	03/21/22	03/21/22	
o-Xylene	ND	2.00	2	03/21/22	03/21/22	
p,m-Xylene	ND	4.00	2	03/21/22	03/21/22	
Total Xylenes	ND	2.00	2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		93.1 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8		96.0 %	70-130	03/21/22	03/21/22	

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

		E205111-04				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Maye				•	rmaryzed	
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L	Analy	yst: RAS		Batch: 2212068
Total Dissolved Solids	583	10.0	1	03/17/22	03/22/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L	Anal	yst: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200	2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		93.1 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8		96.0 %	70-130	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L	Anal	yst: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	1.45	1.00	1	03/21/22	03/21/22	T17
Oil Range Organics (C28-C36)	ND	2.00	1	03/21/22	03/21/22	
Surrogate: n-Nonane		103 %	50-200	03/21/22	03/21/22	
Total Metals by EPA 6010C	mg/L	mg/L	Analy	yst: RKS		Batch: 2212087
Arsenic	ND	0.0200	1	03/19/22	03/20/22	
Barium	ND	0.250	1	03/19/22	03/20/22	C4, C6
Cadmium	ND	0.0100	1	03/19/22	03/20/22	
Chromium	ND	0.0200	1	03/19/22	03/20/22	C4, C6
Lead	ND	0.0100	1	03/19/22	03/20/22	C4, C6
Selenium	ND	0.0500	1	03/19/22	03/20/22	
Silver	ND	0.0100	1	03/19/22	03/20/22	
Dissolved Metals by EPA 6010C	mg/L	mg/L	Anal	yst: RKS		Batch: 2212080
Calcium	104	1.00	1	03/18/22	03/23/22	C4, C6
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	25.3	1.00	1	03/18/22	03/23/22	
Potassium	3.57	1.00	1	03/18/22	03/23/22	C1, C6
Sodium	55.0	2.00	1	03/18/22	03/23/22	C4, C6
Sodium Absorption Ratio (CALC)	1.25		1	03/24/22	03/24/22	



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Analyte	Result	Ellilit	Dilution	Trepared	Anaryzeu	110103
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	0.851	0.250	1	03/19/22	03/19/22	
Chloride	50.5	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 16:03	H2
Nitrate-N	1.16	0.250	1	03/19/22 07:59	03/19/22 16:03	H2
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 16:03	H2
Sulfate	198	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	

Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
				•	Amaryzea	
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:		02/21/22	Batch: 2212089
Acetone	ND	80.0	2	03/21/22	03/21/22	
Benzene	ND	2.00	2	03/21/22	03/21/22	
Bromobenzene	ND	2.00	2	03/21/22	03/21/22	
Bromochloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromodichloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromoform	ND	2.00	2	03/21/22	03/21/22	
Bromomethane	ND	4.00	2	03/21/22	03/21/22	
n-Butyl Benzene	ND	2.00	2	03/21/22	03/21/22	
sec-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
tert-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
Carbon Tetrachloride	ND	2.00	2	03/21/22	03/21/22	
Chlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Chloroethane	ND	4.00	2	03/21/22	03/21/22	
Chloroform	ND	10.0	2	03/21/22	03/21/22	
Chloromethane	ND	4.00	2	03/21/22	03/21/22	
2-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
4-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
Dibromochloromethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/21/22	03/21/22	
1,2-Dibromoethane (EDB)	ND	4.00	2	03/21/22	03/21/22	
Dibromomethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,3-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,4-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/21/22	03/21/22	
1,1-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
cis-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
trans-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
1,3-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
2,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
cis-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
trans-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/21/22	03/21/22	
Ethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/21/22	03/21/22	
Hexachlorobutadiene	ND	10.0	2	03/21/22	03/21/22	
2-Hexanone	ND	40.0	2	03/21/22	03/21/22	
Isopropylbenzene	ND	2.00	2	03/21/22	03/21/22	
4-Isopropyltoluene	ND	2.00	2	03/21/22	03/21/22	
2-Butanone (MEK)	ND	40.0	2	03/21/22	03/21/22	
Methylene Chloride	ND	4.00	2	03/21/22	03/21/22	
1-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	
2-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	

Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

		Reporting	9			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	st: IY		Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/21/22	03/21/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/21/22	03/21/22	
Naphthalene	ND	10.0	2	03/21/22	03/21/22	
n-Propyl Benzene	ND	2.00	2	03/21/22	03/21/22	
Styrene	ND	2.00	2	03/21/22	03/21/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/21/22	03/21/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
Tetrachloroethene	ND	2.00	2	03/21/22	03/21/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,1,1-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
Trichloroethene	ND	2.00	2	03/21/22	03/21/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/21/22	03/21/22	
1,2,3-Trichloropropane	ND	4.00	2	03/21/22	03/21/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/21/22	03/21/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Toluene	ND	2.00	2	03/21/22	03/21/22	
Vinyl chloride	ND	4.00	2	03/21/22	03/21/22	
o-Xylene	ND	2.00	2	03/21/22	03/21/22	
p,m-Xylene	ND	4.00	2	03/21/22	03/21/22	
Total Xylenes	ND	2.00	2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		94.1 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8		96.2 %	70-130	03/21/22	03/21/22	

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

		E203111-03				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L	Anal	lyst: RAS		Batch: 2212068
Total Dissolved Solids	472	11.1	1	03/17/22	03/22/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/L	mg/L	Anal	lyst: IY		Batch: 2212089
Gasoline Range Organics (C6-C10)	ND	0.200	2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		94.1 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8		96.2 %	70-130	03/21/22	03/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/L	mg/L	Anal	lyst: JL		Batch: 2213017
Diesel Range Organics (C10-C28)	ND	1.00	1	03/21/22	03/22/22	
Oil Range Organics (C28-C36)	ND	2.00	1	03/21/22	03/22/22	
Surrogate: n-Nonane		106 %	50-200	03/21/22	03/22/22	
Total Metals by EPA 6010C	mg/L	mg/L	Anal	lyst: RKS		Batch: 2212087
Arsenic	ND	0.0200	1	03/19/22	03/24/22	
Barium	ND	0.250	1	03/19/22	03/24/22	
Cadmium	ND	0.0100	1	03/19/22	03/24/22	
Chromium	ND	0.0200	1	03/19/22	03/24/22	
Lead	ND	0.0100	1	03/19/22	03/24/22	
Selenium	ND	0.0500	1	03/19/22	03/24/22	
Silver	ND	0.0100	1	03/19/22	03/24/22	
Dissolved Metals by EPA 6010C	mg/L	mg/L	Anal	lyst: RKS		Batch: 2212080
Calcium	74.4	1.00	1	03/18/22	03/23/22	C4, C6
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	19.7	1.00	1	03/18/22	03/23/22	
Potassium	4.71	1.00	1	03/18/22	03/23/22	C1, C6
Sodium	53.8	2.00	1	03/18/22	03/23/22	C4, C6
Sodium Absorption Ratio (CALC)	1.43		1	03/24/22	03/24/22	



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	0.818	0.250	1	03/19/22	03/19/22	_
Chloride	44.6	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 16:25	H2
Nitrate-N	0.520	0.250	1	03/19/22 07:59	03/19/22 16:25	H2
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 16:25	H2
Sulfate	141	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	

Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

	r	E203111-06				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:	IY		Batch: 2212089
Acetone	ND	80.0	2	03/21/22	03/21/22	
Benzene	ND	2.00	2	03/21/22	03/21/22	
Bromobenzene	ND	2.00	2	03/21/22	03/21/22	
Bromochloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromodichloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromoform	ND	2.00	2	03/21/22	03/21/22	
Bromomethane	ND	4.00	2	03/21/22	03/21/22	
n-Butyl Benzene	ND	2.00	2	03/21/22	03/21/22	
sec-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
tert-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
Carbon Tetrachloride	ND	2.00	2	03/21/22	03/21/22	
Chlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Chloroethane	ND	4.00	2	03/21/22	03/21/22	
Chloroform	ND	10.0	2	03/21/22	03/21/22	
Chloromethane	ND	4.00	2	03/21/22	03/21/22	
2-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
4-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
Dibromochloromethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/21/22	03/21/22	
1,2-Dibromoethane (EDB)	ND	4.00	2	03/21/22	03/21/22	
Dibromomethane (EBB)	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1.3-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,4-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/21/22	03/21/22	
1,1-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
cis-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
trans-1,2-Dichloroethene	ND	2.00	2	03/21/22	03/21/22	
	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
1,3-Dichloropropane	ND	2.00	2	03/21/22	03/21/22	
2,2-Dichloropropane	ND ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloropropene			2	03/21/22	03/21/22	
cis-1,3-Dichloropropene	ND ND	2.00	2	03/21/22	03/21/22	
trans-1,3-Dichloropropene	ND	2.00			03/21/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/21/22 03/21/22	03/21/22	
Ethylbenzene	ND	2.00	2			
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/21/22	03/21/22	
Hexachlorobutadiene	ND	10.0	2	03/21/22	03/21/22 03/21/22	
2-Hexanone	ND	40.0	2	03/21/22		
Isopropylbenzene	ND	2.00	2	03/21/22	03/21/22	
4-Isopropyltoluene	ND	2.00	2	03/21/22	03/21/22	
2-Butanone (MEK)	ND	40.0	2	03/21/22	03/21/22	
Methylene Chloride	ND	4.00	2	03/21/22	03/21/22	
1-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	
2-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

		Reporting	;			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	i: IY		Batch: 2212089
4-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/21/22	03/21/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/21/22	03/21/22	
Naphthalene	ND	10.0	2	03/21/22	03/21/22	
n-Propyl Benzene	ND	2.00	2	03/21/22	03/21/22	
Styrene	ND	2.00	2	03/21/22	03/21/22	
tert-Amyl Methyl ether (TAME)	ND	2.00	2	03/21/22	03/21/22	
1,1,1,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
Tetrachloroethene	ND	2.00	2	03/21/22	03/21/22	
1,2,3-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,2,4-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
1,1,1-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
1,1,2-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
Trichloroethene	ND	2.00	2	03/21/22	03/21/22	
Trichlorofluoromethane (Freon-11)	ND	4.00	2	03/21/22	03/21/22	
1,2,3-Trichloropropane	ND	4.00	2	03/21/22	03/21/22	
1,2,4-Trimethylbenzene	ND	10.0	2	03/21/22	03/21/22	
1,3,5-Trimethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Toluene	ND	2.00	2	03/21/22	03/21/22	
Vinyl chloride	ND	4.00	2	03/21/22	03/21/22	
o-Xylene	ND	2.00	2	03/21/22	03/21/22	
p,m-Xylene	ND	4.00	2	03/21/22	03/21/22	
Total Xylenes	ND	2.00	2	03/21/22	03/21/22	
Surrogate: Bromofluorobenzene		95.2 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8		96.8 %	70-130	03/21/22	03/21/22	

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

	E203111-00					
	Reporting					
Result	Limit	Di	lution	Prepared	Analyzed	Notes
mg/L	mg/L		Analys	st: RAS		Batch: 2212068
287	33.3		1	03/17/22	03/22/22	
pH Units	pH Units		Analys	st: KL		Batch: 2213006
7.35			1	03/21/22 08:37	03/21/22 10:26	Н5
uS/cm	uS/cm		Analys	st: RAS		Batch: 2213009
924	10.0		1	03/21/22	03/21/22	
mg/L	mg/L		Analys	st: IY		Batch: 2212089
ND	0.200		2	03/21/22	03/21/22	
	95.2 %	70-130		03/21/22	03/21/22	
	101 %	70-130		03/21/22	03/21/22	
	96.8 %	70-130		03/21/22	03/21/22	
mg/L	mg/L		Analys	st: JL		Batch: 2213017
ND	1.00		1	03/21/22	03/22/22	
ND	2.00		1	03/21/22	03/22/22	
	103 %	50-200		03/21/22	03/22/22	
mg/L	mg/L		Analys	st: RKS		Batch: 2212087
ND	0.0200		1	03/19/22	03/24/22	
ND	0.250		1	03/19/22	03/24/22	
ND	0.0100		1	03/19/22	03/24/22	
ND	0.0200		1	03/19/22	03/24/22	
ND	0.0100		1	03/19/22	03/24/22	
ND	0.0500		1	03/19/22	03/24/22	
ND	0.0100		1	03/19/22	03/24/22	
	mg/L 287 pH Units 7.35 uS/cm 924 mg/L ND ND mg/L ND ND nD ND ND ND ND ND ND ND ND ND ND ND ND ND	Result Reporting Limit mg/L mg/L 287 33.3 pH Units pH Units 7.35 uS/cm 924 10.0 mg/L mg/L ND 0.200 95.2 % 101 % 96.8 % mg/L ND 1.00 ND 2.00 103 % mg/L MD 0.0200 ND 0.0200 ND 0.0200 ND 0.0100 ND 0.0200 ND 0.0200 ND 0.0200 ND 0.0100 ND 0.0100 ND 0.0100 ND 0.0100 ND 0.0100 ND 0.0500	Reporting Limit Di mg/L mg/L 287 33.3 pH Units pH Units 7.35 uS/cm uS/cm uS/cm 924 10.0 mg/L mg/L ND 0.200 95.2 % 70-130 101 % 70-130 96.8 % 70-130 mg/L mg/L ND 1.00 ND 2.00 mg/L mg/L ND 0.0200 ND 0.0200 ND 0.0100 ND 0.0200 ND 0.0200 ND 0.0100 ND 0.0100 ND 0.0100 ND 0.0500	Reporting Limit Dilution mg/L mg/L Analys 287 33.3 1 pH Units pH Units Analys 7.35 1 1 uS/cm uS/cm Analys 924 10.0 1 mg/L mg/L Analys ND 0.200 2 95.2 % 70-130 70-130 101 % 70-130 70-130 mg/L mg/L Analys ND 1.00 1 ND 2.00 1 ND 50-200 mg/L mg/L Analys ND 0.0200 1 ND 0.0200 1 ND 0.0200 1 ND 0.0100 1 ND 0.0200 1 ND 0.0200 1 ND 0.0200 1 ND 0.0100 1	Reporting Limit Dilution Prepared mg/L mg/L Analyst: RAS 287 33.3 1 03/17/22 pH Units Analyst: KL To 3/21/22 08:37 uS/cm uS/cm Analyst: RAS 924 10.0 1 03/21/22 mg/L mg/L Analyst: JV ND 0.200 2 03/21/22 mg/L mg/L Analyst: JV ND 70-130 03/21/22 mg/L mg/L Analyst: JV ND 1.00 1 03/21/22 mg/L mg/L Analyst: JV ND 1.00 1 03/21/22 ND 2.00 1 03/21/22 mg/L mg/L Analyst: JV ND 0.0200 1 03/21/22 ND 0.0200 1 03/21/22 ND 0.0200 1 03/19/22 ND 0.0100 1 <td< td=""><td>Reporting Limit Dilution Prepared Analyzed mg/L mg/L Analyst: RAS 287 33.3 1 03/17/22 03/22/22 pH Units pH Units Analyst: KL 7.35 1 03/21/22 08:37 03/21/22 10:26 uS/cm uS/cm Analyst: RAS 924 10.0 1 03/21/22 03/21/22 mg/L mg/L Analyst: IY ND 0.200 2 03/21/22 03/21/22 MD 0.200 2 03/21/22 03/21/22 03/21/22 Mg/L 70-130 03/21/22 03/21/22 03/21/22 Mg/L mg/L Analyst: JL ND ND 1.00 1 03/21/22 03/21/22 ND 2.00 1 03/21/22 03/22/22 ND 2.00 1 03/21/22 03/22/22 mg/L mg/L Analyst: RKS ND 0.0200 1</td></td<>	Reporting Limit Dilution Prepared Analyzed mg/L mg/L Analyst: RAS 287 33.3 1 03/17/22 03/22/22 pH Units pH Units Analyst: KL 7.35 1 03/21/22 08:37 03/21/22 10:26 uS/cm uS/cm Analyst: RAS 924 10.0 1 03/21/22 03/21/22 mg/L mg/L Analyst: IY ND 0.200 2 03/21/22 03/21/22 MD 0.200 2 03/21/22 03/21/22 03/21/22 Mg/L 70-130 03/21/22 03/21/22 03/21/22 Mg/L mg/L Analyst: JL ND ND 1.00 1 03/21/22 03/21/22 ND 2.00 1 03/21/22 03/22/22 ND 2.00 1 03/21/22 03/22/22 mg/L mg/L Analyst: RKS ND 0.0200 1



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analys	st: RKS		Batch: 2212080
Calcium	77.8	1.00	1	03/18/22	03/23/22	C4, C6
Iron	ND	2.00	1	03/18/22	03/23/22	
Magnesium	11.3	1.00	1	03/18/22	03/23/22	
Potassium	2.84	1.00	1	03/18/22	03/23/22	C1, C6
Sodium	43.2	2.00	1	03/18/22	03/23/22	C4, C6
Sodium Absorption Ratio (CALC)	1.21		1	03/24/22	03/24/22	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analys	st: RAS		Batch: 2212086
Fluoride	1.09	0.250	1	03/19/22	03/19/22	
Chloride	40.5	2.00	1	03/19/22	03/19/22	
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 16:46	H2
Nitrate-N	0.858	0.250	1	03/19/22 07:59	03/19/22 16:46	H2
o-Phosphate-P	ND	0.250	1	03/19/22 07:59	03/19/22 16:46	H2
Sulfate	80.0	2.00	1	03/19/22	03/19/22	
Total Mercury by EPA 7470A	ug/L	ug/L	Analys	st: RKS		Batch: 2212088
Mercury	ND	0.200	1	03/19/22	03/20/22	

Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

	1	E203111-07				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst:	: IY		Batch: 2212089
Acetone	ND	80.0	2	03/21/22	03/21/22	
Benzene	ND	2.00	2	03/21/22	03/21/22	
Bromobenzene	ND	2.00	2	03/21/22	03/21/22	
Bromochloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromodichloromethane	ND	2.00	2	03/21/22	03/21/22	
Bromoform	ND	2.00	2	03/21/22	03/21/22	
Bromomethane	ND	4.00	2	03/21/22	03/21/22	
n-Butyl Benzene	ND	2.00	2	03/21/22	03/21/22	
sec-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
tert-Butylbenzene	ND	2.00	2	03/21/22	03/21/22	
Carbon Tetrachloride	ND	2.00	2	03/21/22	03/21/22	
Chlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Chloroethane	ND	4.00	2	03/21/22	03/21/22	
Chloroform	ND	10.0	2	03/21/22	03/21/22	
Chloromethane	ND	4.00	2	03/21/22	03/21/22	
2-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
4-Chlorotoluene	ND	2.00	2	03/21/22	03/21/22	
Dibromochloromethane	ND	2.00	2	03/21/22	03/21/22	
1,2-Dibromo-3-chloropropane (DBCP)	ND	10.0	2	03/21/22	03/21/22	
1,2-Dibromoethane (EDB)	ND	4.00	2	03/21/22	03/21/22	
Dibromomethane (EBB)	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,3-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
1,4-Dichlorobenzene	ND	2.00	2	03/21/22	03/21/22	
Dichlorodifluoromethane (Freon-12)	ND	4.00	2	03/21/22	03/21/22	
1,1-Dichloroethane	ND	2.00	2	03/21/22	03/21/22	
	ND	2.00	2	03/21/22	03/21/22	
1,2-Dichloroethane	ND ND	2.00	2	03/21/22	03/21/22	
1,1-Dichloroethene	ND ND	2.00	2	03/21/22	03/21/22	
cis-1,2-Dichloroethene	ND ND	2.00	2	03/21/22	03/21/22	
trans-1,2-Dichloroethene			2	03/21/22	03/21/22	
1,2-Dichloropropane	ND ND	2.00	2	03/21/22	03/21/22	
1,3-Dichloropropane		2.00	2		03/21/22	
2,2-Dichloropropane	ND	2.00	=	03/21/22		
1,1-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
cis-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
trans-1,3-Dichloropropene	ND	2.00	2	03/21/22	03/21/22	
Diisopropyl Ether (DIPE)	ND	2.00	2	03/21/22	03/21/22	
Ethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Ethyl tert-Butyl Ether (ETBE)	ND	2.00	2	03/21/22	03/21/22	
Hexachlorobutadiene	ND	10.0	2	03/21/22	03/21/22	
2-Hexanone	ND	40.0	2	03/21/22	03/21/22	
Isopropylbenzene	ND	2.00	2	03/21/22	03/21/22	
4-Isopropyltoluene	ND	2.00	2	03/21/22	03/21/22	
2-Butanone (MEK)	ND	40.0	2	03/21/22	03/21/22	
Methylene Chloride	ND	4.00	2	03/21/22	03/21/22	
1-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	
2-Methylnaphthalene	ND	20.0	2	03/21/22	03/21/22	

Newell Law FirmProject Name:West Lovington Strawn Unit 810 W Adams Ave Ste EProject Number:20046-0001Reported:Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

		Reporting	5			
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analys	st: IY		Batch: 2212089
-Methyl-2-pentanone (MIBK)	ND	40.0	2	03/21/22	03/21/22	
Methyl tert-Butyl Ether (MTBE)	ND	2.00	2	03/21/22	03/21/22	
Naphthalene	ND	10.0	2	03/21/22	03/21/22	
-Propyl Benzene	ND	2.00	2	03/21/22	03/21/22	
Styrene	ND	2.00	2	03/21/22	03/21/22	
ert-Amyl Methyl ether (TAME)	ND	2.00	2	03/21/22	03/21/22	
,1,1,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
,1,2,2-Tetrachloroethane	ND	2.00	2	03/21/22	03/21/22	
Tetrachloroethene	ND	2.00	2	03/21/22	03/21/22	
,2,3-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
,2,4-Trichlorobenzene	ND	10.0	2	03/21/22	03/21/22	
,1,1-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
,1,2-Trichloroethane	ND	2.00	2	03/21/22	03/21/22	
Trichloroethene	ND	2.00	2	03/21/22	03/21/22	
Frichlorofluoromethane (Freon-11)	ND	4.00	2	03/21/22	03/21/22	
,2,3-Trichloropropane	ND	4.00	2	03/21/22	03/21/22	
,2,4-Trimethylbenzene	ND	10.0	2	03/21/22	03/21/22	
,3,5-Trimethylbenzene	ND	2.00	2	03/21/22	03/21/22	
Toluene	ND	2.00	2	03/21/22	03/21/22	
Vinyl chloride	ND	4.00	2	03/21/22	03/21/22	
-Xylene	ND	2.00	2	03/21/22	03/21/22	
o,m-Xylene	ND	4.00	2	03/21/22	03/21/22	
Total Xylenes	ND	2.00	2	03/21/22	03/21/22	
iurrogate: Bromofluorobenzene		93.5 %	70-130	03/21/22	03/21/22	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	03/21/22	03/21/22	
Surrogate: Toluene-d8		96.1 %	70-130	03/21/22	03/21/22	

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

	E203111-07					
	Reporting					
Result	Limit	Di	lution	Prepared	Analyzed	Notes
mg/L	mg/L		Analys	st: RAS		Batch: 2212068
333	25.0		1	03/17/22	03/22/22	
pH Units	pH Units		Analys	st: KL		Batch: 2213006
7.78			1	03/21/22 08:37	03/21/22 10:26	Н5
uS/cm	uS/cm		Analys	st: RAS		Batch: 2213009
604	10.0		1	03/21/22	03/21/22	
mg/L	mg/L		Analys	st: IY		Batch: 2212089
ND	0.200		2	03/21/22	03/21/22	
	93.5 %	70-130		03/21/22	03/21/22	
	103 %	70-130		03/21/22	03/21/22	
	96.1 %	70-130		03/21/22	03/21/22	
mg/L	mg/L		Analys	st: JL		Batch: 2213017
ND	1.00		1	03/21/22	03/22/22	
ND	2.00		1	03/21/22	03/22/22	
	103 %	50-200		03/21/22	03/22/22	
mg/L	mg/L		Analys	st: RKS		Batch: 2212087
ND	0.0200		1	03/19/22	03/24/22	
0.275	0.250		1	03/19/22	03/24/22	
ND	0.0100		1	03/19/22	03/24/22	
ND	0.0200		1	03/19/22	03/24/22	
ND	0.0100		1	03/19/22	03/24/22	
ND	0.0500		1	03/19/22	03/24/22	
ND	0.0100		1	03/19/22	03/24/22	
	mg/L 333 pH Units 7.78 uS/cm 604 mg/L ND ND mg/L ND ND ng/L ND ND ng/L ND ND ng/L ND ND ng/L ND ND ng/L ND ND ND ND	Result Reporting Limit mg/L mg/L 333 25.0 pH Units pH Units 7.78 uS/cm uS/cm uS/cm 604 10.0 mg/L mg/L ND 0.200 93.5 % 103 % 96.1 % mg/L ND 1.00 ND 2.00 103 % mg/L MD 0.0200 0.275 0.250 ND 0.0100 ND 0.0200 ND 0.0100 ND 0.0200 ND 0.0100 ND 0.0100 ND 0.0100 ND 0.0100 ND 0.0500	Reporting Limit Di mg/L mg/L 333 25.0 pH Units pH Units 7.78 uS/cm uS/cm uS/cm 604 10.0 mg/L mg/L ND 0.200 93.5 % 70-130 103 % 70-130 96.1 % 70-130 mg/L mg/L ND 1.00 ND 2.00 mg/L mg/L ND 0.0200 0.275 0.250 ND 0.0100 ND 0.0200 ND 0.0200 ND 0.0100 ND 0.0100 ND 0.0100 ND 0.0500	Reporting Limit Dilution mg/L mg/L Analyst 333 25.0 1 pH Units pH Units Analyst 7.78 1 1 uS/cm uS/cm Analyst 604 10.0 1 mg/L mg/L Analyst ND 0.200 2 93.5 % 70-130 70-130 103 % 70-130 70-130 mg/L mg/L Analyst ND 1.00 1 ND 2.00 1 ND 50-200 mg/L mg/L Analyst ND 0.0200 1 ND 0.0200 1 ND 0.0100 1 ND 0.0200 1 ND 0.0200 1 ND 0.0200 1 ND 0.0100 1 ND 0.0100 1 <td>Reporting Limit Dilution Prepared mg/L mg/L Analyst: RAS 333 25.0 1 03/17/22 pH Units pH Units Analyst: KL 7.78 1 03/21/22 08:37 uS/cm uS/cm Analyst: RAS 604 10.0 1 03/21/22 mg/L mg/L Analyst: IV ND 0.200 2 03/21/22 103 % 70-130 03/21/22 p6.1 % 70-130 03/21/22 mg/L mg/L Analyst: JL ND 1.00 1 03/21/22 mg/L mg/L Analyst: JL ND 2.00 1 03/21/22 mg/L mg/L Analyst: RKS ND 0.0200 1 03/21/22 mg/L mg/L Analyst: RKS ND 0.0200 1 03/19/22 ND 0.0100 1 03/19/22 <t< td=""><td>Reporting Limit Dilution Prepared Analyzed mg/L mg/L Analyst: RAS 333 25.0 1 03/17/22 03/22/22 pH Units pH Units Analyst: KL 7.78 1 03/21/22 08:37 03/21/22 10:26 uS/cm uS/cm Analyst: RAS 604 10.0 1 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/22/22 mg/L mg/L Analyst: RKS ND 0.00 1 03/21/22 03/21/22 03/21/22 03/21/22 03/22/22 mg/L mg/L Analyst: RKS N</td></t<></td>	Reporting Limit Dilution Prepared mg/L mg/L Analyst: RAS 333 25.0 1 03/17/22 pH Units pH Units Analyst: KL 7.78 1 03/21/22 08:37 uS/cm uS/cm Analyst: RAS 604 10.0 1 03/21/22 mg/L mg/L Analyst: IV ND 0.200 2 03/21/22 103 % 70-130 03/21/22 p6.1 % 70-130 03/21/22 mg/L mg/L Analyst: JL ND 1.00 1 03/21/22 mg/L mg/L Analyst: JL ND 2.00 1 03/21/22 mg/L mg/L Analyst: RKS ND 0.0200 1 03/21/22 mg/L mg/L Analyst: RKS ND 0.0200 1 03/19/22 ND 0.0100 1 03/19/22 <t< td=""><td>Reporting Limit Dilution Prepared Analyzed mg/L mg/L Analyst: RAS 333 25.0 1 03/17/22 03/22/22 pH Units pH Units Analyst: KL 7.78 1 03/21/22 08:37 03/21/22 10:26 uS/cm uS/cm Analyst: RAS 604 10.0 1 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/22/22 mg/L mg/L Analyst: RKS ND 0.00 1 03/21/22 03/21/22 03/21/22 03/21/22 03/22/22 mg/L mg/L Analyst: RKS N</td></t<>	Reporting Limit Dilution Prepared Analyzed mg/L mg/L Analyst: RAS 333 25.0 1 03/17/22 03/22/22 pH Units pH Units Analyst: KL 7.78 1 03/21/22 08:37 03/21/22 10:26 uS/cm uS/cm Analyst: RAS 604 10.0 1 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/21/22 03/22/22 mg/L mg/L Analyst: RKS ND 0.00 1 03/21/22 03/21/22 03/21/22 03/21/22 03/22/22 mg/L mg/L Analyst: RKS N



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

		Reporting					
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes	
Dissolved Metals by EPA 6010C	mg/L	mg/L	Analyst: RKS			Batch: 2212080	
Calcium	59.8	1.00	1	03/18/22	03/23/22	C4, C6	
Iron	ND	2.00	1	03/18/22	03/23/22		
Magnesium	9.94	1.00	1	03/18/22	03/23/22		
Potassium	3.55	1.00	1	03/18/22	03/23/22	C1, C6	
Sodium	47.5	2.00	1	03/18/22	03/23/22	C4, C6	
Sodium Absorption Ratio (CALC)	1.50		1	03/24/22	03/24/22		
Anions by EPA 300.0/9056A	mg/L	mg/L	Analyst: RAS			Batch: 2212086	
Fluoride	0.995	0.250	1	03/19/22	03/19/22		
Chloride	38.5	2.00	1	03/19/22	03/19/22		
Nitrite-N	ND	0.250	1	03/19/22 07:59	03/19/22 17:08	H2	
Nitrate-N	1.27	0.250	1	03/19/22 07:59	03/19/22 17:08	H2	
o Dhaomhata D	ND	0.250	1	03/19/22 07:59	03/19/22 17:08	H2	
o-Phosphate-P			_	004040	03/19/22		
-	65.3	2.00	I	03/19/22	03/19/22		
Sulfate Total Mercury by EPA 7470A	65.3 ug/L	2.00 ug/L	I Analys	03/19/22 st: RKS	03/19/22	Batch: 2212088	



QC Summary Data

Newell Law FirmProject Name:West Lovington Strawn Unit 8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Prepared: 03/19/22 Analyzed: 03/19/22

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	Notes

Blank (2212089-BLK1) Acetone Benzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane Bromoform Bromomethane n-Butyl Benzene sec-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chlorotehane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichlorotehane 1,1-Dichlorotehane 1,1-Dichlorotehane 1,1-Dichlorotehene tias-1,2-Dichlorotehene tias-1,2-Dichlorotehene tias-1,2-Dichlorotehene tias-1,3-Dichloropropane 1,1-Dichlorotehene tias-1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dich	ND ND ND ND ND	40.0
Acetone Benzene Bromobenzene Bromodichloromethane Bromodichloromethane Bromomethane Bromomethane Bromomethane n-Butyl Benzene see-Butylbenzene tert-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chlorotethane Chlorotethane Chlorotothane Chlorotothane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichlorothane 1,1-Dichlorothane 1,1-Dichlorothane 1,1-Dichlorothene trans-1,2-Dichlorothene trans-1,2-Dichloropropane 2,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropene cis-1,3-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene cis-1,3-Dichloropropene cis-1,3-Dichloropropene disopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methyl-2-pentanone (MIBK) Methyl-1-2-pentanone (MIBK)	ND ND ND ND	40.0
Benzene Bromobenzene Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromodichloromethane Bromodichloromethane n-Butyl Benzene sec-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chlorotethane Chlorotethane Chlorotothane Chlorototuene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorotethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane trans-1,3-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene 1-Sicopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND ND ND ND	1010
Bromochloromethane Bromodichloromethane Bromoform Bromomethane n-Butyl Benzene see-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichlorothene cis-1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene cis-1,3-Dichloropropene biisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 1-Propyl Benzene	ND ND	1.00
Bromodichloromethane Bromoform Bromomethane n-Butyl Benzene sec-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chloroethane Chloroethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichloroethane (Freon-12) 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropane	1.00	
Bromoform Bromomethane n-Butyl Benzene sec-Butylbenzene Carbon Tetrachloride Chlorobenzene Chlorobenzene Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorothane (Freon-12) 1,1-Dichlorothane 1,2-Dichlorothane 1,2-Dichlorothene cis-1,2-Dichlorothene trans-1,2-Dichlorothene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene cis-1,3-Dichloropropene biisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 1-Propyl Benzene		1.00
Bromomethane n-Butyl Benzene sec-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene Jibromochloromethane 1,2-Dibromochloromethane 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,3-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dich	ND	1.00
n-Butyl Benzene sec-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chlorotethane Chlorotethane Chlorotothane Chlorototluene 4-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene		1.00
sec-Butylbenzene tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chlorotethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	2.00
tert-Butylbenzene Carbon Tetrachloride Chlorobenzene Chlorotethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethyl benzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 1-Propyl Benzene	ND	1.00
Carbon Tetrachloride Chlorobenzene Chloroform Chloroothane Chloroothane 2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromoethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropane 2-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropane 1,1-Dichl	ND ND	1.00
Chlorobenzene Chloroethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane (Freon-12) 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene biisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Chloroethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromoethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorothane 1,2-Dichlorothane 1,2-Dichlorothane 1,1-Dichlorothane 1,1-Dichlorothene cis-1,2-Dichloroethene trans-1,2-Dichlorothene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 2,2-Dichloropropane 2,2-Dichloropropane 2,1-Dichloropropene cis-1,3-Dichloropropene biisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Chloromethane 2-Chlorotoluene 4-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	2.00
2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene dis-1,3-Dichloropropene 1,1-Dichloropropene 1,1-Dichloropropene 1,1-Dichloropropene 0-Lisopropyl Ether (DIPE) Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	5.00
4-Chlorotoluene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Unisopropyl Ether (DIPE) Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	2.00
Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropene tirans-1,3-Dichloropropene tirans-1,3-Dichloropropene tirans-1,3-Dichloropropene biisopropyl Ether (DIPE) Ethyl berzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
1,2-Dibromoethane (EDB) Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene bisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 1,3-Dichloropropane cis-1,3-Dichloropropene cis-1,3-Dichloropropene bisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	5.00
1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis=1,2-Dichloroethene trans=1,2-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis=1,3-Dichloropropene trans=1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	2.00
1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND ND	1.00 1.00
1,4-Dichlorobenzene Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloropthene 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Dichlorodifluoromethane (Freon-12) 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropthene 1,2-Dichloroptopane 1,3-Dichloroptopane 1,1-Dichloroptopane 1,1-Dichloroptopene cis-1,3-Dichloroptopene trans-1,3-Dichloroptopene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	2.00
1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane 1,2-Dichloropropane 2,2-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
trans-1,2-Dichloroethene 1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropyltoluene 2-Hexanone Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
1,3-Dichloropropane 2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
2,2-Dichloropropane 1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
cis-1,3-Dichloropropene trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND ND	1.00
trans-1,3-Dichloropropene Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00 1.00
Diisopropyl Ether (DIPE) Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Ethylbenzene Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Ethyl tert-Butyl Ether (ETBE) Hexachlorobutadiene 2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
2-Hexanone Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Isopropylbenzene 4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	5.00
4-Isopropyltoluene 2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	20.0
2-Butanone (MEK) Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
Methylene Chloride 1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	1.00
1-Methylnaphthalene 2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	20.0
2-Methylnaphthalene 4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND ND	2.00
4-Methyl-2-pentanone (MIBK) Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	10.0
Methyl tert-Butyl Ether (MTBE) Naphthalene n-Propyl Benzene	ND	10.0 20.0
Naphthalene n-Propyl Benzene	ND	1.00
n-Propyl Benzene	ND	5.00
	ND	1.00
Styrene	ND	1.00
tert-Amyl Methyl ether (TAME)	ND	1.00
1,1,1,2-Tetrachloroethane	ND	1.00
1,1,2,2-Tetrachloroethane	ND	1.00
Tetrachloroethene	ND	1.00
1,2,3-Trichlorobenzene	ND	5.00
1,2,4-Trichlorobenzene	ND ND	5.00
1,1,1-Trichloroethane	ND ND	1.00
1,1,2-Trichloroethane Trichloroethene	1117	1.00 1.00
Trichlorofluoromethane (Freon-11)	ND	2.00
1,2,3-Trichloropropane	ND ND	2.00
1,2,4-Trimethylbenzene	ND ND ND	5.00

QC Summary Data

Newell Law FirmProject Name:West Lovington Strawn Unit 8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

10 W Adams Ave Ste E		Project Number:	20	0046-0001					•••
Lovington NM, 88260		Project Manager:	N:	atalie Gladden					3/25/2022 4:10:14PM
	V	olatile Organic	Compo	unds by EPA	A 8260I	3			Analyst: IY
Analyte		Reporting	Spike	Source		Rec		RPD	
•	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	Notes
Blank (2212089-BLK1)							Prepared: 03	3/19/22 A	nalyzed: 03/19/22
,3,5-Trimethylbenzene	ND	1.00							
Foluene	ND ND	1.00 2.00							
Vinyl chloride o-Xylene	ND	1.00							
,m-Xylene	ND	2.00							
otal Xylenes	ND	1.00							
urrogate: Bromofluorobenzene	9.62		10.0		96.2	70-130			
'urrogate: 1,2-Dichloroethane-d4	10.1		10.0		101	70-130			
urrogate: 1,2-Dichioroethane-a4 urrogate: Toluene-d8	9.93		10.0		99.3	70-130			
	9.93		10.0		77.3	, 0-150			
LCS (2212089-BS1)			50.0		02.2	70.120	Prepared: 03	3/19/22 A	nalyzed: 03/19/22
Benzene	46.7	1.00	50.0		93.3	70-130			
Bromochloromethane	45.1 42.6	1.00	50.0 50.0		90.1 85.2	70-130 70-130			
ert-Butylbenzene Ehlorobenzene	46.9	1.00 1.00	50.0		93.7	70-130			
,2-Dibromo-3-chloropropane (DBCP)	38.3	5.00	50.0		76.6	65-135			
,4-Dichlorobenzene	44.0	1.00	50.0		88.0	70-130			
,1-Dichloroethene	44.3	1.00	50.0		88.6	80-120			
,2-Dichloropropane	48.7	1.00	50.0		97.4	80-120			
Diisopropyl Ether (DIPE)	47.0	1.00	50.0		94.0	65-135			
Ethylbenzene	47.0	1.00	50.0		93.9	80-120			
Methylene Chloride	46.2	2.00	50.0		92.3	70-130			
-Methyl-2-pentanone (MIBK)	85.5 83.3	20.0	100 100		85.5 83.3	50-160 70-130			
Methyl tert-Butyl Ether (MTBE) -Propyl Benzene	83.3 47.3	1.00 1.00	50.0		83.3 94.6	70-130			
,1,1,2-Tetrachloroethane	43.8	1.00	50.0		87.6	70-130			
etrachloroethene	44.4	1.00	50.0		88.7	70-130			
,2,3-Trichlorobenzene	39.1	5.00	50.0		78.3	70-140			
,1,1-Trichloroethane	40.7	1.00	50.0		81.4	70-130			
,1,2-Trichloroethane	44.9	1.00	50.0		89.8	70-130			
richloroethene	44.5	1.00	50.0		88.9	70-130			
oluene	46.7	1.00	50.0		93.4	80-120			
/inyl chloride	54.7 45.5	2.00	50.0		109	80-120 70-130			
-Xylene	45.5 90.9	1.00	50.0 100		91.0 90.9	70-130 70-130			
,m-Xylene otal Xylenes	136	2.00 1.00	150		90.9	70-130			
urrogate: Bromofluorobenzene	10.1	1.00	10.0		101	70-130			
			10.0		99.9	70-130			
urrogate: 1,2-Dichloroethane-d4 urrogate: Toluene-d8	9.99 10.0		10.0		100	70-130			
	10.0				- 00	, , 150			
CS Dup (2212089-BSD1)	51.2	1.00	50.0		102	70-130	9.28	3/19/22 A 20	nalyzed: 03/19/22
denzene Bromochloromethane	48.8	1.00 1.00	50.0		97.7	70-130	9.28 8.07	20	
ert-Butylbenzene	47.2	1.00	50.0		94.4	70-130	10.2	20	
Chlorobenzene	52.1	1.00	50.0		104	70-130	10.6	20	
,2-Dibromo-3-chloropropane (DBCP)	41.6	5.00	50.0		83.2	65-135	8.33	30	
,4-Dichlorobenzene	49.6	1.00	50.0		99.2	70-130	12.0	20	
,1-Dichloroethene	48.9	1.00	50.0		97.9	80-120	9.95	20	
2-Dichloropropane	53.9	1.00	50.0		108	80-120	10.2	20	
hisopropyl Ether (DIPE)	51.4	1.00	50.0		103	65-135	8.91	20	
thylbenzene	52.1 50.5	1.00	50.0 50.0		104 101	80-120 70-130	10.3 8.92	20 20	
Methylene Chloride	50.5 91.5	2.00 20.0	100		91.5	50-160	8.92 6.78	30	
-Methyl-2-pentanone (MIBK) 1ethyl tert-Butyl Ether (MTBE)	88.9	1.00	100		88.9	70-130	6.56	20	
-Propyl Benzene	52.6	1.00	50.0		105	70-130	10.7	20	
,1,1,2-Tetrachloroethane	48.8	1.00	50.0		97.7	70-130	10.9	20	
etrachloroethene	49.8	1.00	50.0		99.6	70-130	11.5	20	
,2,3-Trichlorobenzene	43.7	5.00	50.0		87.4	70-140	11.0	20	
,1,1-Trichloroethane	45.4	1.00	50.0		90.9	70-130	11.0	20	
,1,2-Trichloroethane	48.9	1.00	50.0		97.8	70-130	8.49	20	
Frichloroethene	50.1	1.00	50.0		100	70-130	11.9	20	



20

100

70-130

11.9

50.0

1.00

Trichloroethene

50.1

Analyst: IY

QC Summary Data

Newell Law FirmProject Name:West Lovington Strawn Unit 8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

	Volatile Organi	c Compo	ınds by EP	A 82601	3		
ılt	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	

Analyte	Result	Reporting Limit ug/L	Spike Level ug/L	Source Result ug/L	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
	ug/L					%			
LCS Dup (2212089-BSD1)]	Prepared: 0	3/19/22 Anal	yzed: 03/19/22
Toluene	52.0	1.00	50.0		104	80-120	10.7	20	
Vinyl chloride	60.2	2.00	50.0		120	80-120	9.59	30	
o-Xylene	50.7	1.00	50.0		101	70-130	10.8	20	
p,m-Xylene	101	2.00	100		101	70-130	10.5	20	
Total Xylenes	152	1.00	150		101	70-130	10.6	20	
Surrogate: Bromofluorobenzene	9.98		10.0		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	9.97		10.0		99.7	70-130			
Surrogate: Toluene-d8	10.2		10.0		102	70-130			



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	Reported: 3/25/2022 4:10:14PM			
10 W Adams Ave Ste E	Project Number:	20046-0001				
Lovington NM, 88260	Project Manager:	Natalie Gladden				
Wet Chem/Gravimetric by SM2540C						

	Wet Chem/Gravimetric by SM2540C							Analyst: RAS		
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes	
Blank (2212068-BLK1)							Prepared: 0	3/17/22 Ana	lyzed: 03/18/22	
Total Dissolved Solids	ND	10.0								
LCS (2212068-BS1)							Prepared: 0	3/17/22 Ana	lyzed: 03/18/22	
Total Dissolved Solids	88.0	10.0	100		88.0	55-134				
Duplicate (2212068-DUP1)				Source:	E203079-0	01	Prepared: 0	3/17/22 Ana	lyzed: 03/18/22	
Total Dissolved Solids	43200	200		42100			2.39	5		
Duplicate (2212068-DUP2)				Source:	E203111-0)7	Prepared: 0	3/17/22 Ana	lyzed: 03/22/22	
Total Dissolved Solids	345	10.0		333			3.69	5		



Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	Reported:
10 W Adams Ave Ste E	Project Number:	20046-0001	
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

71Ct Chemistry by 7040C/450011 1		Wet	Chemistry	by	9040C/4500H+B
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Analyst: KL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	pH Units	pH Units	pH Units	pH Units	%	%	%	%	Notes

LCS (2213006-BS1)				Prepared: 03	3/21/22 Analyzed: 03/21/22
pH	8.00	8.00	100 98.75	-101.25	
Duplicate (2213006-DUP1)		S	ource: E203111-07	Prepared: 03	3/21/22 Analyzed: 03/21/22
pH	7.87		7.78	1.15	20



Analyte

QC Summary Data

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	Reported:
10 W Adams Ave Ste E Lovington NM, 88260	Project Number: Project Manager:	20046-0001 Natalie Gladden	3/25/2022 4:10:14PM

Wet Chemistry by SM2320B								
Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes
					F	Prepared: 0	3/21/22 Anal	vzed: 03/21/22

LCS (2213016-BS1)					Pı	repared: 03	/21/22 A	Analyzed: 03/21/22	2
Total Alkalinity (as CaCO3 at pH 4.5)	246	10.0	250	98.4	70-130				
LCS Dup (2213016-BSD1)					Pı	repared: 03	/21/22 A	Analyzed: 03/21/22	2



Newell Law Firm 10 W Adams Ave Ste E	Project Name: Project Number:	West Lovington Strawn Unit 8 20046-0001	Reported:
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

Lovington NM, 88260		Project Manager	r: Na	italie Gladder	1				3/25/2022 4:10:14PM
		Wet Che	mistry by	9050A/251	0B				Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	uS/cm	uS/cm	uS/cm	uS/cm	%	%	%	%	Notes
Blank (2213009-BLK1)							Prepared: 0	3/21/22 A	nalyzed: 03/21/22
Specific Conductance (@ 25 C)	ND	10.0							
LCS (2213009-BS1)							Prepared: 0	3/21/22 A	nalyzed: 03/21/22
Specific Conductance (@ 25 C)	1410	10.0	1410		99.8	98-102			
Duplicate (2213009-DUP1)				Source:	E203110-0)3	Prepared: 0	3/21/22 A	nalyzed: 03/21/22
Specific Conductance (@ 25 C)	616	10.0		616			0.00	20	



Newell Law FirmProject Name:West Lovington Strawn Unit 8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

Nonhalogenated Organic	S DV EPA	. 8015D -	GRO
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Analyst: IY

Analyte Re	Reporting sult Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
mį	/L mg/L	mg/L	mg/L	%	%	%	%	Notes

Blank (2212089-BLK1)						Prepared: 0	3/19/22 Ana	lyzed: 03/19/22
Gasoline Range Organics (C6-C10)	ND	0.100						
Surrogate: Bromofluorobenzene	0.00962		0.0100	96.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0101		0.0100	101	70-130			
Surrogate: Toluene-d8	0.00993		0.0100	99.3	70-130			
LCS (2212089-BS2)						Prepared: 0	3/19/22 Ana	lyzed: 03/19/22
Gasoline Range Organics (C6-C10)	1.10	0.100	1.00	110	70-130			
Surrogate: Bromofluorobenzene	0.00970		0.0100	97.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.00975		0.0100	97.5	70-130			
Surrogate: Toluene-d8	0.00998		0.0100	99.8	70-130			
LCS Dup (2212089-BSD2)						Prepared: 0	3/19/22 Ana	lyzed: 03/19/22
Gasoline Range Organics (C6-C10)	1.15	0.100	1.00	115	70-130	4.95	20	
Surrogate: Bromofluorobenzene	0.00983		0.0100	98.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.00976		0.0100	97.6	70-130			
Surrogate: Toluene-d8	0.00995		0.0100	99.5	70-130			



Newell Law FirmProject Name:West Lovington Strawn Unit 8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

Lovington NM, 88260		Project Manager	r: Na	italie Gladder	1				3/25/2022 4:10:14PM			
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	/ORO		Analyst: JL				
Analyte	Result mg/L	Reporting Limit mg/L	Spike Level mg/L	Source Result mg/L	Rec %	Rec Limits	RPD %	RPD Limi %				
Blank (2213017-BLK1)							Prepared: 0	3/21/22	Analyzed: 03/22/22			
Diesel Range Organics (C10-C28)	ND	1.00										
Oil Range Organics (C28-C36)	ND	2.00										
Surrogate: n-Nonane	2.65		2.50		106	50-200						
LCS (2213017-BS1)							Prepared: 0	3/21/22	Analyzed: 03/22/22			
Diesel Range Organics (C10-C28)	8.23	1.00	12.5		65.9	36-132						
Surrogate: n-Nonane	2.49		2.50		99.7	50-200						
LCS Dup (2213017-BSD1)							Prepared: 0	3/21/22	Analyzed: 03/22/22			
Diesel Range Organics (C10-C28)	8.60	1.00	12.5		68.8	36-132	4.29	20				
Surrogate: n-Nonane	2.54		2.50		101	50-200						



Newell Law FirmProject Name:West Lovington Strawn Unit 8Reported:10 W Adams Ave Ste EProject Number:20046-0001Lovington NM, 88260Project Manager:Natalie Gladden3/25/2022 4:10:14PM

Lovington NM, 88260		Project Manager:	1	Natalie Gladden					3/25/2022 4:10:14PM
		Total M	letals by	EPA 6010C					Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes
Blank (2212087-BLK1)							Prepared: 0	3/19/22 A	nalyzed: 03/20/22
Arsenic	ND	0.0200							
Barium	ND	0.250							
Cadmium	ND	0.0100							
Chromium	ND	0.0200							
Lead	ND	0.0100							
Selenium	ND	0.0500							
Silver	ND	0.0100							
LCS (2212087-BS1)							Prepared: 0	3/19/22 A	nalyzed: 03/20/22
Arsenic	0.444	0.0200	0.500		88.8	80-120			
Barium	11.4	0.250	12.5		91.0	80-120			
Cadmium	0.236	0.0100	0.250		94.4	80-120			
Chromium	0.939	0.0200	1.00		93.9	80-120			
Lead	0.241	0.0100	0.250		96.2	80-120			
Selenium	1.14	0.0500	1.25		91.2	80-120			
Silver	0.0854	0.0100	0.100		85.4	80-120			
Matrix Spike (2212087-MS1)				Source: F	E203093-	01	Prepared: 0	3/19/22 A	nalyzed: 03/20/22
Arsenic	4.36	0.200	5.00	ND	87.2	75-125			
3arium	111	2.50	125	ND	88.6	75-125			
Cadmium	2.23	0.100	2.50	ND	89.3	75-125			
Chromium	8.90	0.200	10.0	ND	89.0	75-125			
Lead	2.28	0.100	2.50	ND	91.4	75-125			
Selenium	11.2	0.500	12.5	ND	89.5	75-125			
Silver	0.815	0.100	1.00	ND	81.5	75-125			
Matrix Spike Dup (2212087-MSD1)				Source: F	E203093-	01	Prepared: 0	3/19/22 A	nalyzed: 03/20/22

5.00

125

2.50

10.0

2.50

12.5

ND

ND

ND

ND

ND

ND

87.5

87.7

90.7

89.7

92.5

89.6

75-125

75-125

75-125

75-125

75-125

75-125

75-125

4.38

110

2.27

8.97

2.31

11.2

0.200

2.50

0.100

0.200

0.100

0.500

0.100



0.389

1.09

1.51

0.851

1.22

0.0893

1.58

20

20

20

20

20

20

Barium

Lead

Silver

Cadmium Chromium

Selenium

Sodium

QC Summary Data

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	Reported:
10 W Adams Ave Ste E	Project Number:	20046-0001	-
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

Lovington NM, 88260		Project Number. Project Manager		atalie Gladden					3/25/2022 4:10:14PM
		Dissolved	Metals b	y EPA 6010	C				Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes
Blank (2212080-BLK1)							Prepared: 0	3/18/22 Aı	nalyzed: 03/19/22
Calcium	ND	1.00							
Iron	ND	2.00							
Magnesium	ND	1.00							
Potassium	ND	1.00							
Sodium	ND	2.00							
LCS (2212080-BS1)							Prepared: 0	3/18/22 Aı	nalyzed: 03/19/22
Calcium	48.3	1.00	50.0		96.6	80-120			
ron	101	2.00	100		101	80-120			
Magnesium	49.9	1.00	50.0		99.9	80-120			
Potassium	4.68	1.00	5.00		93.6	80-120			
Sodium	17.9	2.00	20.0		89.6	80-120			
Matrix Spike (2212080-MS1)				Source: I	E 203110- 0	03	Prepared: 0	3/18/22 Aı	nalyzed: 03/19/22
Calcium	91.6	1.00	50.0	48.4	86.4	75-125			
ron	99.6	2.00	100	ND	99.6	75-125			
Magnesium	63.8	1.00	50.0	14.0	99.7	75-125			
Potassium	8.12	1.00	5.00	3.23	97.6	75-125			
odium	67.2	2.00	20.0	48.4	93.8	75-125			
Matrix Spike Dup (2212080-MSD1)				Source: I	E 203110- 0	03	Prepared: 0	3/18/22 Aı	nalyzed: 03/19/22
Calcium	95.1	1.00	50.0	48.4	93.3	75-125	3.74	20	
ron	100	2.00	100	ND	100	75-125	0.481	20	
Magnesium	63.9	1.00	50.0	14.0	99.9	75-125	0.188	20	
Potassium	8.46	1.00	5.00	3.23	104	75-125	4.12	20	

75-125

69.0

2.00



Sulfate

QC Summary Data

Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	Reported:
10 W Adams Ave Ste E	Project Number:	20046-0001	-
Lovington NM, 88260	Project Manager:	Natalie Gladden	3/25/2022 4:10:14PM

Lovington NM, 88260		Project Number: Project Manager:		atalie Gladden					3/25/2022 4:10:14PM	
		Anions l	by EPA 3			Analyst: RAS				
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	Notes	
Blank (2212086-BLK1)							Prepared: 03	3/19/22 A	nalyzed: 03/19/22	
Fluoride	ND	0.250								
Chloride	ND	2.00								
Nitrite-N	ND	0.250								
Nitrate-N	ND	0.250								
o-Phosphate-P	ND	0.250								
Sulfate	ND	2.00								
LCS (2212086-BS1)							Prepared: 03	3/19/22 A	nalyzed: 03/19/22	
Fluoride	2.57	0.250	2.50		103	90-110				
Chloride	24.9	2.00	25.0		99.5	90-110				
Nitrite-N	2.73	0.250	2.50		109	90-110				
Nitrate-N	2.58	0.250	2.50		103	90-110				
o-Phosphate-P	12.4	0.250	12.5		99.1	90-110				
Sulfate	24.9	2.00	25.0		99.5	90-110				
LCS Dup (2212086-BSD1)							Prepared: 03	3/19/22 A	nalyzed: 03/19/22	
Fluoride	2.56	0.250	2.50		102	90-110	0.312	20		
Chloride	24.8	2.00	25.0		99.0	90-110	0.552	20		
Nitrite-N	2.54	0.250	2.50		102	90-110	6.95	20		
Nitrate-N	2.58	0.250	2.50		103	90-110	0.271	20		
o-Phosphate-P	12.3	0.250	12.5		98.7	90-110	0.404	20		
	245		25.0		00.0	00 110	0.504	20		

25.0

90-110

98.9

0.524

20

24.7

2.00



Newell Law Firm 10 W Adams Ave Ste E Lovington NM, 88260		Project Name: Project Number: Project Manager:	2	West Lovington 20046-0001 Natalie Gladden		nit 8			Reported: 3/25/2022 4:10:14PM
		Total Me	ercury b	y EPA 7470	A				Analyst: RKS
Analyte	Result ug/L	Reporting Limit ug/L	Spike Level ug/L	Source Result ug/L	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2212088-BLK1)							Prepared: 0	3/19/22	Analyzed: 03/20/22
Mercury	ND	0.200							
LCS (2212088-BS1)							Prepared: 0	3/19/22	Analyzed: 03/20/22
Mercury	1.82	0.200	2.00		91.2	80-120			
Matrix Spike (2212088-MS1)				Source:	E203110-0)2	Prepared: 0	3/19/22	Analyzed: 03/20/22
Mercury	1.77	0.200	2.00	ND	88.7	75-125			
Matrix Spike Dup (2212088-MSD1)				Source:	E203110-0)2	Prepared: 0	3/19/22	Analyzed: 03/20/22
Mercury	1.76	0.200	2.00	ND	88.2	75-125	0.578	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

ſ	Newell Law Firm	Project Name:	West Lovington Strawn Unit 8	
١	10 W Adams Ave Ste E	Project Number:	20046-0001	Reported:
١	Lovington NM, 88260	Project Manager:	Natalie Gladden	03/25/22 16:10

C1	The CV recovery	was above method	acceptance limits.
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C4 The CV recovery was below method acceptance limits.

C6 The CV recovery was outside acceptance limits. The sample was analyzed multiple times all with similar bracketing CV results.

H2 Sample was receive with an insufficient amount of time to prepare and analyze the sample within the method prescribed holding time

The analysis was performed as quickly as possible per client request.

H5 pH is specified to be performed in the field within 15 minutes of sampling. The sample was performed as quickly as possible.

T17 The sample chromatographic pattern does not resemble the typical fuel standard used for quantitation.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



roject Inf	ormation	1						Chain of Custo	dy												Page	of
lient: ∧	lewell	Lau	Firn	n			Bill To				La		se Or					TA			EPA P	rogram
roject: w	Jest L	ovingt	ton Str	awn Unit 8	Attent	ion: ES	S	~ 1		WO#			Job				2D	3D	Standa	rd	CWA	SDWA
roject M	anager:	Mille	Newel	1	Addre	ss: 242	7 County	120	- Ed	303	3111				1000-		X		-			DCDA
Address:	7in /	autoal	Loo N	M	Phone		Hobbs, X	JV					Anai	ysis a	nd Meth	od						RCRA
hone:	e, ZIP L	oungi	Lon, N	1.7.		Natai	1:0		- 2	5											State	
mail:					Eman.	100000	10		y 80.	y 803	- I	0		0.0		5			NM	CO	UT AZ	TX
eport du	ie by:								RO b	RO b	y 8021	826	6010	le 30	H	S	¥		X			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID				Lab Numb	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by	VOC by 8260	Metals 6010	Chloride 300.0	3	BGDOC	верос				Remarks	
	3/16	A	1	MW-2				-1				X	X		X	X						
09:48	1	1	1	MW-4				2				1	1		1	(
10:36				MW-8				3														
11:30				MW-81				4				1										
14:20				MW-81	0			5					1									
15:11				MW-75	S			6														*
16:32				MW-71				7				1	1		1	1						
			/													1				Ÿ		
Addition	al Instru	ctions:																				
				ticity of this sample. I ar may be grounds for lega		t tampering w	with or intentionally	mislabelling the sal	nple loca	tion,			100000000		The Committee of				eived on ice th °C on subsequ		Are to the service	ed or received
Relinguish	ed by: (Sign	ature)	Date	Time	F	Received by:		Date 2	1.22	Time		5	Rec	eive	d on ice	1	ab Us	e Onl	у			
Relinquish	red by: (Sign	nature)	Date	e Time	30 F	Received by:	(Signature)	Date 3/18	1	Time			T1	5,70	5,,,50	T2			ТЗ			
Relinguish	ed by: (Sign	nature)	Date			Received by:	(Signature)	Date	100	Time				G Ter	np °C	4			13			
Sample Ma	triv: S - Soil S	Sd - Solid Se	- Sludge, A -	Aqueous, O - Other				Conta	ner Tvi	oe: g -	glass	, p - p			, ag - an	ber gla	ass, v -	VOA				
Note: San	ples are dis	carded 30	days after r	esults are reported ur	nless other	arrangemen	its are made. H												port for th	e anal	ysis of the	above

Printed: 3/25/2022 3:13:34PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Claime Newerl Law Firm Date Received Williams (1998) 1998 Date Date (1998) 1998 Date Date (1998) 1998 Date Date (1998) 1998 Date Date (1998) 1998 Date Date (1998) 1998 Date Date (1998) 1998 Date Date (1998) 1998 Date Date Date (1998) 1998 Date Date Date Date Date Date Date Date	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	no response concerning enese terms within 2 i notice of the		,			_
Email: ranalising-congregatifinglise com Dase Date: 022522 1780 (5 day TAT) Chain of Custody (COC) 1. Does the number of anaptes per aampling site location match the COC Yes 2. Does the number of anaptes per aampling site location match the COC Yes 2. Were sampled of the yeller of carrier? Yes Carrier: Carrier Yes Carrier: C	Client:	Newell Law Firm	Date Received:	03/18/22 0	08:15	Work Order ID: E203111	
Chain of Curtods, (COC) 1. Does the sample ID march the COC 7 2. Does the number of samples per sampling site location match the COC 7 3. West earnlysh completed file, signatures, dates/einess, requested analyses? Yes 7 4. Was the COC complete, i.e., signatures, dates/einess, requested analyses? Yes 7 5. Were all samples received within boding time? Yes 1 5. Were all samples received within boding time? Yes 1 6. Did the COC inductive standerd TLAT or Expedited TAT? Yes 3 5. Minute Collect. TAT 1 6. Did the COC inducte standerd TLAT or Expedited TAT? Yes 3 8. If yes, was cooler received in good condition? Yes 1 8. If yes, was cooler received in good condition? Yes 1 9. Was the samples perceived with out enough time to run within holding time for Nitrates, Nitrites, and O-Phosphates. Alkalinity was not analyzed for samples 2-7 due to insufficient sample amount. Sample 4 & 5 Were Consideration of the Collection of Samples present? Yes 1 10. Were consideration of Samples present? Yes 1 11. If yes, were causedy-security seals present? Yes 1 12. Was the samples Collection of Samples present? Yes 1 13. If yes visible ice, exceed the temperature. Actual sample temperature: 4*C 5. Sample Consideration of Samples present? Yes 1 15. Are VOC samples collected in VOA Visib? Yes 1 16. Is the lead space leas than 6-8 min (pes sized or less)? Yes 2 17. Was a pick burn of Sample source of the simple were preserved? Yes 1 18. Are non-VOC samples collected in the correct containers? Yes 1 19. Are non-VOC samples present? Yes 1 19. Are non-VOC samples present? Yes 2 10. Beet the OCR or field labels indicate the samples were preserved? Yes 2 11. Beet the COC or field labels indicate the samples were preserved? Yes 2 12. Are sampled Collected? No Collectors name? Sample Drive Area of the Cock specify which phasely is to be analyzed? No 2 18. Are non-VOC samples posterior to get sent to a subcontant laboratory? No 2 18. Are non-VOC samples posterior but nor ephase, i.e., multiphase? Yes 1 19. Are non-VOC	Phone:	(575) 739-6395	Date Logged In:	03/17/22 1	7:48	Logged In By: Caitlin Christian	
L. Does the sample ID match the COC? 2. Were samples dropped off by elient or carrier? 3. Were samples dropped off by elient or carrier? 4. Was the COC compluse, i.e., signatures, datacellular, sig	Email:	natalie@energystaffingllc.com	Due Date:	03/25/22 1	7:00 (5 day TAT)		
2. Does the number of samples per sampling site location match the COC West and the control of samples of the control or carrier? 4. Was the COC complete, i.e., signatures, dater/times, requested analyses? 5. Were all samples received within holding hard. 5. Were all samples received within holding hard. 5. Were all samples received within holding hard. 6. Did the COC mid-cate standard TAT, or Expedited TAT? 7. Was a sample cooler received in good condition? 7. Was a sample cooler received in good condition? 8. Were within the control of man, i.e., not broken? 9. West the sampled by received in good condition? 9. West the sampled by received in good condition? 10. Were ustookly-security seals present? 10. Were ustookly-security seals present? 11. If yes, ware custedly-security seals present? 12. Was to te sample received in visit (see the caused temp is 4°C, i.e., 4°C) or yes 13. If no visible ice, record the temperature. Actual sample temperature: 14. Are aqueous VOC samples present? 15. Are VOC samples collected in VOA Visit? 16. Are to CO samples collected in VOA Visit? 17. Was a raip blank (TB) included for VOC analyses? 18. Are non-VOS amples collected in VOA Visit? 19. It is appropriate volume-veight or number of sample containers? 19. It is appropriate volume-veight or number of sample containers? 19. But appropriate volume-veight or number of sample containers? 19. Dava Time Collecter? 20. Dees the COC or field labels indicate the samples were preserved? 21. Test good of the correct containers? 22. Are samples or collected in volume veight or number of sample outsiders? 23. If no visible ice, record the temperature in the correct containers? 24. It is in filteration required and/or requested for dissolved metals? 25. Test field Labels. 26. Dees the COC or field labels indicate the samples were preserved? 27. Yes an authorized the order of samples were preserved? 28. Are manyles coulded the required to get sent to a subcounter laboratory? 29. Was a nubcouract Laboratory.		-		***			
3. Were stamples dropped off by client or carrier? West the COC complete, i.e., signatures, datestimes, expected analyses? Siver all samples received within holding sime? Note: Amplies, such as part byte doubted to conducted in the fiold, i.e., 15 minute hold iton, are not included in this discussion. Sample Trus Around Time (TAT) Did the COC inclinate standard TAT, or Expedited TAT? Sample Control. 7. Wes a sample conter received? 7. Wes a sample conter received? 8. West occoler received in good condition? 9. Was the sample jot preceived in set, i.e., not broken? 9. Was the sample received and preservation is not reguled, if samples the received with set of insufficient sample amount. Sample 4 & 5 were not analyzed for samples 2-7 due to insufficient sample amount. Sample 4 & 5 were not analyzed for Conductivity or pH as well. 13. If no visible is, coveroff the temperature. Actual sample temperature: 4°C Sample Container. 14. Are aqueous VOC samples present? 15. Are VOC samples collected in VOA Visib? 16. Is the head spannles collected in VOA Visib? 17. Was a sity blank (TB) included for VOC analyses? 18. Are no-NOC samples collected in VOA Visib.? 19. Is the appropriate volume/weight or number of sample containers. 19. Is the appropriate volume/weight or number of sample containers. 19. Is the appropriate volume/weight or number of sample were preserved? 20. Were field sample labels filled out with the minimum information. Sample Trosecution. Sample Discontainer. 21. Does the cord or field labels indicate the samples were preserved? 22. It is the sample have more than one phase, i.e., multiphase? No. 23. Are sampled to COC specify which phase(s) is to be analyzed? No. 24. Is a label filled out with the minimum information. Sample Provervation. 25. Are sampled to COC specify which phase(s) is to be analyzed? No. 26. It is the control of the correct containers? No. 27. It is a desired than the discontance of the control of the control of the control of the control of the c		<u>=</u>	h the COC				
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Note: Analysis, such as plt which should be conducted in the field, it, is, 15 minus bold time, are not included in this clusters. Sample True Around Time (TAT) 6. Did the COC indicate standard TAT, or Expedited TAT? 7. Was a sample cooler received? 8. If yes, was cooler received? 9. Was five, was cooler received intact, i.e., not broken? 10. Were custody/security seals intant? 11. If yes, were custody/security seals intant? 12. Was do sample cooler noceived in cereived in set of the correct of samples are received wit 15 minutes of sampling and the correct of samples are received wit 15 minutes of sampling in the correct of samples are received wit 15 minutes of sampling in the correct of samples are received wit 15 minutes of sampling in the correct of samples present? 13. If no visible ice, record the temperature. Actual sample temperature: 4°C Samuel Container. 14. Are aqueous VOC samples present? 15. Are VOC samples collected in VOO visit? 15. Are VOC samples collected in VOC analyses? 19. Is the expropriate volume/weight or number of sample containers? 19. Is the expropriate volume/weight or number of sample containers collected? 19. Date of time Collected? 20. Were field sample labels filled out with the minimum information: Sample Treservation. 21. Does the COC or field labels indicate the samples were preserved? 22. Les and the COC or field labels indicate the samples were preserved? 23. Les labe filteration required and/or requested for dissolved metals? 24. Is lab filteration required and/or requested for dissolved metals? 25. Are sampled to preserved to get sent to a subcontract laboratory? 26. Note of the correct containers and the samples were preserved? 27. If yes, does the COC operity which phase(s) is to be analyzed? 28. Are sampled have more than one phase, i.e., multiphase? 29. Was a subcontract Laboratory. 20. Was a subcontract Laboratory specified by the client and if so who? 10. If yes, were custed without the courter of the present of the present of the presen			ed analyses?				
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29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: na Client Instruction			₁ ?	No			
Client Instruction					Subcontract Lab	o: na	
	Chent in	struction					

Date

Signature of client authorizing changes to the COC or sample disposition.

Released to Imaging: 2/21/2025 11:17:21 AM

envirotech Inc.



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 2203A30

April 13, 2022

Clayton Barnhill

CMB Environmental

P. O. Box 2304

Roswell, NM 88202-2304

TEL: (575) 622-6510 FAX: (575) 625-0538

RE: Energy Resources Corp West Lovington

Strawn Unit 8 Unit L Sec. 34, T15, SR. 35E

Dear Clayton Barnhill:

Hall Environmental Analysis Laboratory received 19 sample(s) on 3/18/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT:CMB EnvironmentalClient Sample ID: W. Windmill Water WellProject:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:00:00 AMLab ID:2203A30-001Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: METALS						Analyst	: DBK
Antimony	ND	0.0010		mg/L	1	4/1/2022 1:56:16 PM	A86914
Arsenic	0.0084	0.0010		mg/L	1	4/1/2022 1:56:16 PM	A86914
Beryllium	ND	0.0010		mg/L	1	4/1/2022 1:56:16 PM	A86914
Cadmium	ND	0.00050		mg/L	1	4/1/2022 1:56:16 PM	A86914
Selenium	0.0049	0.0010		mg/L	1	4/1/2022 8:01:12 PM	A86914
Thallium	ND	0.00025		mg/L	1	4/1/2022 1:56:16 PM	A86914
EPA METHOD 300.0: ANIONS						Analyst	: LRN
Chloride	24	5.0		mg/L	10	3/21/2022 11:19:54 AM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst	: MRA
Conductivity	590	10		µmhos/c	1	3/22/2022 1:45:49 PM	R86681
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst	: KS
Total Dissolved Solids	367	20.0		mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst	: MRA
рН	7.92		Н	pH units	1	3/22/2022 1:45:49 PM	R86681
EPA METHOD 200.7: METALS						Analyst	: ELS
Barium	0.071	0.0030		mg/L	1	3/24/2022 8:57:55 AM	A86739
Chromium	ND	0.0060		mg/L	1	3/24/2022 8:57:55 AM	A86739
Nickel	ND	0.010		mg/L	1	3/24/2022 8:57:55 AM	A86739
Sodium	33	1.0		mg/L	1	3/24/2022 8:57:55 AM	A86739
Zinc	ND	0.010		mg/L	1	3/24/2022 8:57:55 AM	A86739
EPA METHOD 245.1: MERCURY						Analyst	: VP
Mercury	ND	0.00020		mg/L	1	3/28/2022 3:14:15 PM	66425

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: House Water Well

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:25:00 AMLab ID:2203A30-002Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: METALS						Analyst	: DBK
Antimony	ND	0.0010		mg/L	1	4/1/2022 2:01:35 PM	A86914
Arsenic	0.0078	0.0010		mg/L	1	4/1/2022 2:01:35 PM	A86914
Beryllium	ND	0.0010		mg/L	1	4/1/2022 2:01:35 PM	A86914
Cadmium	ND	0.00050		mg/L	1	4/1/2022 2:01:35 PM	A86914
Selenium	0.0047	0.0010		mg/L	1	4/1/2022 8:17:12 PM	A86914
Thallium	ND	0.00025		mg/L	1	4/1/2022 2:01:35 PM	A86914
EPA METHOD 300.0: ANIONS						Analyst	:: LRN
Chloride	32	5.0		mg/L	10	3/21/2022 12:11:19 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst	: MRA
Conductivity	700	10		µmhos/c	1	3/22/2022 1:50:21 PM	R86681
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst	: KS
Total Dissolved Solids	438	20.0		mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst	: MRA
рН	7.69		Н	pH units	1	3/22/2022 1:50:21 PM	R86681
EPA METHOD 200.7: METALS						Analyst	: ELS
Barium	0.063	0.0030		mg/L	1	3/24/2022 9:04:41 AM	A86739
Chromium	ND	0.0060		mg/L	1	3/24/2022 9:04:41 AM	A86739
Nickel	ND	0.010		mg/L	1	3/24/2022 9:04:41 AM	A86739
Sodium	42	1.0		mg/L	1	3/24/2022 9:04:41 AM	A86739
Zinc	ND	0.010		mg/L	1	3/24/2022 9:04:41 AM	A86739
EPA METHOD 245.1: MERCURY						Analyst	: VP
Mercury	ND	0.00020		mg/L	1	3/28/2022 3:16:24 PM	66425

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: Pond Water Well

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:30:00 AMLab ID:2203A30-003Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: METALS						Analyst	: DBK
Antimony	ND	0.0010		mg/L	1	4/1/2022 2:23:12 PM	A86914
Arsenic	0.0067	0.0010		mg/L	1	4/1/2022 2:23:12 PM	A86914
Beryllium	ND	0.0010		mg/L	1	4/1/2022 2:23:12 PM	A86914
Cadmium	ND	0.00050		mg/L	1	4/1/2022 2:23:12 PM	A86914
Selenium	0.0041	0.0010		mg/L	1	4/1/2022 8:22:33 PM	A86914
Thallium	ND	0.00025		mg/L	1	4/1/2022 2:23:12 PM	A86914
EPA METHOD 300.0: ANIONS						Analyst	: LRN
Chloride	32	5.0		mg/L	10	3/21/2022 1:02:46 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst	: MRA
Conductivity	700	10		µmhos/c	1	3/22/2022 1:54:48 PM	R86681
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst	: KS
Total Dissolved Solids	437	20.0		mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst	: MRA
рН	7.94		Н	pH units	1	3/22/2022 1:54:48 PM	R86681
EPA METHOD 200.7: METALS						Analyst	: ELS
Barium	0.098	0.0030		mg/L	1	3/24/2022 9:06:20 AM	A86739
Chromium	ND	0.0060		mg/L	1	3/24/2022 9:06:20 AM	A86739
Nickel	ND	0.010		mg/L	1	3/24/2022 9:06:20 AM	A86739
Sodium	38	1.0		mg/L	1	3/24/2022 9:06:20 AM	A86739
Zinc	ND	0.010		mg/L	1	3/24/2022 9:06:20 AM	A86739
EPA METHOD 245.1: MERCURY						Analyst	: VP
Mercury	ND	0.00020		mg/L	1	3/28/2022 3:18:32 PM	66425

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9S

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 9:41:00 AMLab ID:2203A30-004Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LRN
Chloride	27	5.0		mg/L	10	3/21/2022 1:28:32 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst	MRA
Conductivity	640	10		µmhos/c	1	3/22/2022 2:03:11 PM	R86681
•	0.0	.0		μσο, σ	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS	000	400	_	4		Analyst	
Total Dissolved Solids	360	100	D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst	MRA
рН	7.44		Н	pH units	1	3/22/2022 2:03:11 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst	DAM
Acenaphthene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Aniline	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Anthracene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Azobenzene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Benzoic acid	ND	20		μg/L	1	3/24/2022 8:45:17 PM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/24/2022 8:45:17 PM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Carbazole	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Chrysene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/24/2022 8:45:17 PM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/24/2022 8:45:17 PM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9S

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 9:41:00 AMLab ID:2203A30-004Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Diethyl phthalate	ND	10	μg/L	1	3/24/2022 8:45:17 PM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/24/2022 8:45:17 PM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Fluoranthene	ND	10	μg/L	1	3/24/2022 8:45:17 PM	66307
Fluorene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Isophorone	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Naphthalene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Pentachlorophenol	ND	20	μg/L	1	3/24/2022 8:45:17 PM	66307
Phenanthrene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Phenol	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Pyrene	ND	5.0	μg/L	1	3/24/2022 8:45:17 PM	66307
Pyridine	ND	10	μg/L	1	3/24/2022 8:45:17 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9S

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 9:41:00 AMLab ID:2203A30-004Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst	: DAM
1,2,4-Trichlorobenzene	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
2,4,5-Trichlorophenol	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
2,4,6-Trichlorophenol	ND	5.0		μg/L	1	3/24/2022 8:45:17 PM	66307
Surr: 2-Fluorophenol	56.7	29.4-87.7		%Rec	1	3/24/2022 8:45:17 PM	66307
Surr: Phenol-d5	40.8	28.5-64.7		%Rec	1	3/24/2022 8:45:17 PM	66307
Surr: 2,4,6-Tribromophenol	86.2	18.6-129		%Rec	1	3/24/2022 8:45:17 PM	66307
Surr: Nitrobenzene-d5	64.2	36.9-103		%Rec	1	3/24/2022 8:45:17 PM	66307
Surr: 2-Fluorobiphenyl	62.7	38.1-99.9		%Rec	1	3/24/2022 8:45:17 PM	66307
Surr: 4-Terphenyl-d14	104	48-155		%Rec	1	3/24/2022 8:45:17 PM	66307
EPA METHOD 8260B: VOLATILES						Analyst	: JR
Benzene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Toluene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Ethylbenzene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Naphthalene	ND	2.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
1-Methylnaphthalene	ND	4.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
2-Methylnaphthalene	ND	4.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Acetone	ND	10		μg/L	1	3/23/2022 5:44:33 PM	R86690
Bromobenzene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Bromodichloromethane	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Bromoform	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Bromomethane	ND	3.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
2-Butanone	ND	10		μg/L	1	3/23/2022 5:44:33 PM	R86690
Carbon disulfide	ND	10		μg/L	1	3/23/2022 5:44:33 PM	R86690
Carbon Tetrachloride	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Chlorobenzene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Chloroethane	ND	2.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Chloroform	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Chloromethane	ND	3.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
2-Chlorotoluene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
4-Chlorotoluene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
cis-1,2-DCE	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
cis-1,3-Dichloropropene	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0		μg/L	1	3/23/2022 5:44:33 PM	R86690
Dibromochloromethane	ND	1.0		μg/L	1	3/23/2022 5:44:33 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
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- P Sample pH Not In Range
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Page 6 of 100

Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9S

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 9:41:00 AMLab ID:2203A30-004Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 5:44:33 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 5:44:33 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 5:44:33 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 5:44:33 PM	R86690
Surr: 1,2-Dichloroethane-d4	84.2	70-130	%Rec	1	3/23/2022 5:44:33 PM	R86690
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	3/23/2022 5:44:33 PM	R86690
Surr: Dibromofluoromethane	87.9	70-130	%Rec	1	3/23/2022 5:44:33 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report
Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9S

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 9:41:00 AMLab ID:2203A30-004Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: JR
Surr: Toluene-d8	103	70-130	%Rec	1	3/23/2022 5:44:33 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9M

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 10:38:00 AMLab ID:2203A30-005Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	46	5.0		mg/L	10	3/21/2022 1:54:15 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	720	10		µmhos/c	1	3/22/2022 2:07:40 PM	R86681
•	720	10		μιτιτου/ σ	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS			_			Analyst:	
Total Dissolved Solids	404	40.0	D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	8.26		Н	pH units	1	3/22/2022 2:07:40 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Aniline	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Anthracene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Azobenzene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Benzoic acid	ND	20		μg/L	1	3/24/2022 9:27:13 PM	66307
Benzyl alcohol	5.2	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/24/2022 9:27:13 PM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Carbazole	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Chrysene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/24/2022 9:27:13 PM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/24/2022 9:27:13 PM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/24/2022 9:27:13 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 100

Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9M

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 10:38:00 AMLab ID:2203A30-005Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Diethyl phthalate	ND	10	μg/L	1	3/24/2022 9:27:13 PM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/24/2022 9:27:13 PM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Fluoranthene	ND	10	μg/L	1	3/24/2022 9:27:13 PM	66307
Fluorene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Isophorone	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Naphthalene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Pentachlorophenol	ND	20	μg/L	1	3/24/2022 9:27:13 PM	66307
Phenanthrene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Phenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Pyrene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Pyridine	ND	10	μg/L	1	3/24/2022 9:27:13 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
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- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9M

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 10:38:00 AMLab ID:2203A30-005Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: DAM
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 9:27:13 PM	66307
Surr: 2-Fluorophenol	34.4	29.4-87.7	%Rec	1	3/24/2022 9:27:13 PM	66307
Surr: Phenol-d5	33.6	28.5-64.7	%Rec	1	3/24/2022 9:27:13 PM	66307
Surr: 2,4,6-Tribromophenol	81.6	18.6-129	%Rec	1	3/24/2022 9:27:13 PM	66307
Surr: Nitrobenzene-d5	41.1	36.9-103	%Rec	1	3/24/2022 9:27:13 PM	66307
Surr: 2-Fluorobiphenyl	38.5	38.1-99.9	%Rec	1	3/24/2022 9:27:13 PM	66307
Surr: 4-Terphenyl-d14	98.0	48-155	%Rec	1	3/24/2022 9:27:13 PM	66307
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Benzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Toluene	2.9	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Ethylbenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Naphthalene	ND	2.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
2-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Acetone	ND	10	μg/L	1	3/23/2022 6:13:10 PM	R86690
Bromobenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Bromodichloromethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Bromoform	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Bromomethane	ND	3.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
2-Butanone	ND	10	μg/L	1	3/23/2022 6:13:10 PM	R86690
Carbon disulfide	ND	10	μg/L	1	3/23/2022 6:13:10 PM	R86690
Carbon Tetrachloride	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Chlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Chloroethane	ND	2.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Chloroform	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Chloromethane	ND	3.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
2-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
4-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
cis-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Dibromochloromethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9M

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 10:38:00 AMLab ID:2203A30-005Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 6:13:10 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 6:13:10 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 6:13:10 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 6:13:10 PM	R86690
Surr: 1,2-Dichloroethane-d4	87.7	70-130	%Rec	1	3/23/2022 6:13:10 PM	R86690
Surr: 4-Bromofluorobenzene	95.7	70-130	%Rec	1	3/23/2022 6:13:10 PM	R86690
Surr: Dibromofluoromethane	92.3	70-130	%Rec	1	3/23/2022 6:13:10 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-9M

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 10:38:00 AMLab ID:2203A30-005Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

 EPA METHOD 8260B: VOLATILES
 Analyst: JR

 Surr: Toluene-d8
 102
 70-130
 %Rec
 1
 3/23/2022 6:13:10 PM
 R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9D

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:45:00 AMLab ID:2203A30-006Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	29	5.0		mg/L	10	3/21/2022 2:19:58 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	530	10		µmhos/c	- 1	3/22/2022 2:11:44 PM	R86681
•	330	10		μιτιτίοσ/ο	'		
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst:	
Total Dissolved Solids	366	40.0	D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.91		Н	pH units	1	3/22/2022 2:11:44 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Aniline	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Anthracene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Azobenzene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Benzoic acid	ND	20		μg/L	1	3/24/2022 10:08:57 PM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/24/2022 10:08:57 PM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Carbazole	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Chrysene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/24/2022 10:08:57 PM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/24/2022 10:08:57 PM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/24/2022 10:08:57 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9D

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:45:00 AMLab ID:2203A30-006Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Diethyl phthalate	ND	10	μg/L	1	3/24/2022 10:08:57 PM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/24/2022 10:08:57 PM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Fluoranthene	ND	10	μg/L	1	3/24/2022 10:08:57 PM	66307
Fluorene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Isophorone	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Naphthalene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Pentachlorophenol	ND	20	μg/L	1	3/24/2022 10:08:57 PM	66307
Phenanthrene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Phenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Pyrene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Pyridine	ND	10	μg/L	1	3/24/2022 10:08:57 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9D

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:45:00 AMLab ID:2203A30-006Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 10:08:57 PM	66307
Surr: 2-Fluorophenol	38.7	29.4-87.7	%Red	1	3/24/2022 10:08:57 PM	66307
Surr: Phenol-d5	31.0	28.5-64.7	%Red	1	3/24/2022 10:08:57 PM	66307
Surr: 2,4,6-Tribromophenol	57.4	18.6-129	%Red	1	3/24/2022 10:08:57 PM	66307
Surr: Nitrobenzene-d5	45.6	36.9-103	%Red	1	3/24/2022 10:08:57 PM	66307
Surr: 2-Fluorobiphenyl	45.2	38.1-99.9	%Red	1	3/24/2022 10:08:57 PM	66307
Surr: 4-Terphenyl-d14	90.6	48-155	%Red	1	3/24/2022 10:08:57 PM	66307
EPA METHOD 8260B: VOLATILES					Analyst	: JR
Benzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Toluene	1.6	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Ethylbenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Naphthalene	ND	2.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
2-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Acetone	ND	10	μg/L	1	3/23/2022 6:41:45 PM	R86690
Bromobenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Bromodichloromethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Bromoform	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Bromomethane	ND	3.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
2-Butanone	ND	10	μg/L	1	3/23/2022 6:41:45 PM	R86690
Carbon disulfide	ND	10	μg/L	1	3/23/2022 6:41:45 PM	R86690
Carbon Tetrachloride	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Chlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Chloroethane	ND	2.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Chloroform	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Chloromethane	ND	3.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
2-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
4-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
cis-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Dibromochloromethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-9D

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:45:00 AMLab ID:2203A30-006Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 6:41:45 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 6:41:45 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 6:41:45 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 6:41:45 PM	R86690
Surr: 1,2-Dichloroethane-d4	88.2	70-130	%Rec	1	3/23/2022 6:41:45 PM	R86690
Surr: 4-Bromofluorobenzene	98.8	70-130	%Rec	1	3/23/2022 6:41:45 PM	R86690
Surr: Dibromofluoromethane	93.0	70-130	%Rec	1	3/23/2022 6:41:45 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-9D

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 11:45:00 AMLab ID:2203A30-006Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

 EPA METHOD 8260B: VOLATILES
 Analyst: JR

 Surr: Toluene-d8
 98.0
 70-130
 %Rec
 1
 3/23/2022 6:41:45 PM
 R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-1

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:10:00 PMLab ID:2203A30-007Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	26	5.0		mg/L	10	3/21/2022 2:45:42 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	640	10		µmhos/c	1	3/22/2022 2:16:13 PM	R86681
SM2540C MOD: TOTAL DISSOLVED SOLIDS				,	-		
	000	400	_			Analyst:	
Total Dissolved Solids	390	100	D	mg/L	1	3/24/2022 10:56:00 AM	
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.74		Н	pH units	1	3/22/2022 2:16:13 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Aniline	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Anthracene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Azobenzene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Benzoic acid	ND	20		μg/L	1	3/24/2022 10:50:42 PM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/24/2022 10:50:42 PM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Carbazole	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Chrysene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/24/2022 10:50:42 PM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/24/2022 10:50:42 PM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/24/2022 10:50:42 PM	66307

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

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
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- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-1

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:10:00 PMLab ID:2203A30-007Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

PAMETHOD 8270C: SEMIVOLATILES	Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
1,3-Dichlorobenzene	EPA METHOD 8270C: SEMIVOLATILES					Analyst	DAM
1,4-Dichlorobenzene	1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
3.3 - Dichlorobenzidine	1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
Diethyl phthalate	1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
Dimethyl phthalate	3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
2.4-Dichlorophenol ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dimethylphenol ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 4.6-Dinitro-2-methylphenol ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrophenol ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 µg/	Diethyl phthalate	ND	10	μg/L	1	3/24/2022 10:50:42 PM	66307
2.4-Dimethylphenol ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 4.6-Dinitro-2-methylphenol ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrophenol ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.4-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitrotoluene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307 2.6-Dinitro	Dimethyl phthalate	ND	10	μg/L	1	3/24/2022 10:50:42 PM	66307
A6-Dinitro-2-methylphenol	2,4-Dichlorophenol	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
2,4-Dinitrophenol	2,4-Dimethylphenol	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
2,4-Dinitrotoluene	4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
2,6-Dinitrotoluene	2,4-Dinitrophenol	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
Fluoranthene ND 10	2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
Fluorene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Hexachlorobenzene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Hexachlorobutadiene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Hexachlorocyclopentadiene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Hexachlorocyclopentadiene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Hexachlorocyclopentadiene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Hexachlorocethane ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1,2,3-cd)pyrene ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 66307 Indeno(1	2,6-Dinitrotoluene	ND	5.0		1	3/24/2022 10:50:42 PM	66307
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Pyrene ND 5.0 μg/L 1 3/24/2022 10:50:42 PM 66307	Phenol						
,	Pyrene						
,	Pyridine	ND	10	μg/L	1	3/24/2022 10:50:42 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-1

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:10:00 PMLab ID:2203A30-007Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

2.4,6-Trichlorophenol	Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
2.4,6-Trichlorophenol	EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
2,4,6-Trichlorophenol ND 5.0 µg/L 1 3/24/2022 10:50:42 PM 665 Surr: 2-Fluorophenol 52.6 29.4-87.7 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: Phenol-d5 39.2 28.5-64.7 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: Phenol-d5 66.1 36.9-103 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: Nitrobenzene-d5 66.1 36.9-103 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 2-Fluorophphenol 41.7 38.1-99.9 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 2-Fluorophphenyl 61.7 38.1-99.9 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/23/2022 7:10:10 PM R8 R8-20 R	1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
Surr: 2-Fluorophenol 52.6 29.4-87.7 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: Phenol-d5 39.2 28.5-64.7 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 2.4-6-Tribromophenol 74.8 18.6-129 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 2.4-Europhiphenyl 61.7 38.1-99.9 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 2-Fluorobiphenyl 61.7 38.1-99.9 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 2-Fluorobiphenyl 61.7 38.1-99.9 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665 Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 7:10:10 PM Rec 48-15 Surri-4-Terphenyl-d14 3/23/2022 7:10:10 PM Rec 48-15 Surri-4-Terphenyl-d14 3/23/2022 7:10:10 PM Rec 48-15 Surri-4-Terphenyl-d14 3/23/2022 7:10:10 PM Rec 48-15 Surri-4-Terphenyl-d14 3/23/2022 7:10:10 PM Rec 48-15 Surri-4-Terphenyl-d14 3/23/2022 7:10:10 PM Rec 48-15 Surri-4-Terphenyl-d14 3/23/2022 7:10:10 PM Rec 4	2,4,5-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
Surr: Phenol-d5	2,4,6-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 10:50:42 PM	66307
Surr: 2.4,6-Tribromophenol 74.8 16.6-129 %Rec 1 3/24/2022 10:50:42 PM 665 66.1 36.9-103 %Rec 1 3/24/2022 10:50:42 PM 665 66.1 36.9-103 %Rec 1 3/24/2022 10:50:42 PM 665 66.1 36.9-103 %Rec 1 3/24/2022 10:50:42 PM 665 665 66.1 36.9-103 %Rec 1 3/24/2022 10:50:42 PM 665 665 66.1 36.9-103 66.1 36.	Surr: 2-Fluorophenol	52.6	29.4-87.7	%Rec	1	3/24/2022 10:50:42 PM	66307
Surr: Nitrobenzene-d5	Surr: Phenol-d5	39.2	28.5-64.7	%Rec	1	3/24/2022 10:50:42 PM	66307
Surr: 2-Fluorobiphenyl 61.7 38.1-99.9 %Rec 1 3/24/2022 10:50:42 PM 66:50:50:42 PM 66:50:50:42 PM 66:50:50:42 PM 66:50:42 PM 68:50:42 PM 66:50:42 PM	Surr: 2,4,6-Tribromophenol	74.8	18.6-129	%Rec	1	3/24/2022 10:50:42 PM	66307
Surr: 4-Terphenyl-d14 95.3 48-155 %Rec 1 3/24/2022 10:50:42 PM 665	Surr: Nitrobenzene-d5	66.1	36.9-103	%Rec	1	3/24/2022 10:50:42 PM	66307
Benzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8	Surr: 2-Fluorobiphenyl	61.7	38.1-99.9	%Rec	1	3/24/2022 10:50:42 PM	66307
Benzene	Surr: 4-Terphenyl-d14	95.3	48-155	%Rec	1	3/24/2022 10:50:42 PM	66307
Toluene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Ethylbenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Methyl tert-butyl ether (MTBE) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2,4-Trimethylbenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,3,5-Trimethylbenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dichloroethane (EDC) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1-Methylnaphthalene ND 2.0 µg/L 1 3/23/2022 7:10:10 PM R8 1-Methylnaphthalene ND 4.0 µg/L 1 3/23/2022 7:10:10 PM R8 Acetone ND 4.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromobenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromodichloromethane ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromoform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromoform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromoform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromoform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Carbon disulfide ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Carbon disulfide ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Carbon Tetrachloride ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 2.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 2.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloroforme ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8	EPA METHOD 8260B: VOLATILES					Analyst	: JR
Toluene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Ethylbenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Methyl tert-butyl ether (MTBE) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2,4-Trimethylbenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dichloroethane (EDC) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Methylnaphthalene ND 4.0 µg/L 1 3/23/2022 7:10:10 PM R8 2-Methylnaphthalene ND	Benzene	ND	1.0	µg/L	1	3/23/2022 7:10:10 PM	R86690
Ethylbenzene	Toluene	ND	1.0		1		R86690
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1,3,5-Trimethylbenzene		ND	1.0		1	3/23/2022 7:10:10 PM	R86690
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1-Methylnaphthalene ND 4.0 µg/L 1 3/23/2022 7:10:10 PM R8 2-Methylnaphthalene ND 4.0 µg/L 1 3/23/2022 7:10:10 PM R8 Acetone ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Bromobenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromodichloromethane ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromoform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromomethane ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromomethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 2-Butanone ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Carbon disulfide ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Carbon Tetrachloride ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chlorobenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chlorothane ND 2.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chlorotethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chlorotethane ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chlorototluene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 cis-1,3-Dichloropropene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-Dibromo-3-chloropropane ND 2.0 µg/L 1 3/23/2022 7:10:10 PM R8	1,2-Dibromoethane (EDB)	ND	1.0		1	3/23/2022 7:10:10 PM	R86690
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2-Methylnaphthalene ND 4.0 µg/L 1 3/23/2022 7:10:10 PM R8 Acetone ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Bromobenzene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromodichloromethane ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromoform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Bromomethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 2-Butanone ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 2-Butanone ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 2-Butanone ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Carbon disulfide ND 10 µg/L 1 3/23/2022 7:10:10 PM R8 Carbon Tetrachloride ND 1.0 µg/L 1 3/23/2022 7:1	1-Methylnaphthalene	ND	4.0		1	3/23/2022 7:10:10 PM	R86690
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Bromomethane ND 3.0 μg/L 1 3/23/2022 7:10:10 PM R8 2-Butanone ND 10 μg/L 1 3/23/2022 7:10:10 PM R8 Carbon disulfide ND 10 μg/L 1 3/23/2022 7:10:10 PM R8 Carbon Tetrachloride ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chlorobenzene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chlorotoluene ND 3.0 μg/L 1 3/23/2022 7:10:10 PM R8 2-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 4-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 μg/L 1 3/23/20	Bromodichloromethane	ND	1.0		1	3/23/2022 7:10:10 PM	R86690
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Carbon disulfide ND 10 μg/L 1 3/23/2022 7:10:10 PM R8 Carbon Tetrachloride ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chlorobenzene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloromethane ND 3.0 μg/L 1 3/23/2022 7:10:10 PM R8 2-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 4-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane ND 2.0 μg/L <	Bromomethane	ND	3.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Carbon Tetrachloride ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chlorobenzene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloromethane ND 3.0 μg/L 1 3/23/2022 7:10:10 PM R8 2-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 4-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8	2-Butanone	ND	10	μg/L	1	3/23/2022 7:10:10 PM	R86690
Chlorobenzene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroethane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloromethane ND 3.0 μg/L 1 3/23/2022 7:10:10 PM R8 2-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 4-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8	Carbon disulfide	ND	10	μg/L	1	3/23/2022 7:10:10 PM	R86690
Chloroethane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloroform ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 Chloromethane ND 3.0 μg/L 1 3/23/2022 7:10:10 PM R8 2-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 4-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8	Carbon Tetrachloride	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Chloroform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloromethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 2-Chlorotoluene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 4-Chlorotoluene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 cis-1,3-Dichloropropene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane ND 2.0 µg/L 1 3/23/2022 7:10:10 PM R8	Chlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Chloroform ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 Chloromethane ND 3.0 µg/L 1 3/23/2022 7:10:10 PM R8 2-Chlorotoluene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 4-Chlorotoluene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 cis-1,2-DCE ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 cis-1,3-Dichloropropene ND 1.0 µg/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane ND 2.0 µg/L 1 3/23/2022 7:10:10 PM R8	Chloroethane	ND	2.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
2-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/d 4-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/d cis-1,2-DCE ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/d cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/d 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8/d	Chloroform	ND	1.0		1	3/23/2022 7:10:10 PM	R86690
4-Chlorotoluene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/r cis-1,2-DCE ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/r cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/r 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8/r	Chloromethane	ND	3.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
cis-1,2-DCE ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/I cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/I 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8/I	2-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8/I 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/23/2022 7:10:10 PM R8/I	4-Chlorotoluene	ND	1.0		1	3/23/2022 7:10:10 PM	R86690
cis-1,3-Dichloropropene ND 1.0 μ g/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane ND 2.0 μ g/L 1 3/23/2022 7:10:10 PM R8 1,2-Dibromo-3-chloropropane	cis-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
, , , , , , , , , , , , , , , , , , , ,	cis-1,3-Dichloropropene	ND	1.0		1	3/23/2022 7:10:10 PM	R86690
	1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Dibromochloromethane ND 1.0 μg/L 1 3/23/2022 7:10:10 PM R8	Dibromochloromethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-1

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:10:00 PMLab ID:2203A30-007Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 7:10:10 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 7:10:10 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 7:10:10 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 7:10:10 PM	R86690
Surr: 1,2-Dichloroethane-d4	84.2	70-130	%Rec	1	3/23/2022 7:10:10 PM	R86690
Surr: 4-Bromofluorobenzene	99.6	70-130	%Rec	1	3/23/2022 7:10:10 PM	R86690
Surr: Dibromofluoromethane	93.3	70-130	%Rec	1	3/23/2022 7:10:10 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-1

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:10:00 PMLab ID:2203A30-007Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

 EPA METHOD 8260B: VOLATILES
 Analyst: JR

 Surr: Toluene-d8
 100
 70-130
 %Rec
 1
 3/23/2022 7:10:10 PM
 R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-5

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:46:00 PMLab ID:2203A30-008Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	25	5.0		mg/L	10	3/21/2022 3:37:09 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	640	10		µmhos/c	1	3/22/2022 2:20:42 PM	R86681
SM2540C MOD: TOTAL DISSOLVED SOLIDS				,	-		
	540	000	*5			Analyst:	
Total Dissolved Solids	510	200	*D	mg/L	1	3/24/2022 10:56:00 AM	
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.82		Н	pH units	1	3/22/2022 2:20:42 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Aniline	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Anthracene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Azobenzene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Benzoic acid	ND	20		μg/L	1	3/24/2022 11:32:14 PM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/24/2022 11:32:14 PM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Carbazole	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Chrysene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/24/2022 11:32:14 PM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/24/2022 11:32:14 PM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/24/2022 11:32:14 PM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Client Sample ID: MW-5

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental

Project: Energy Resources Corp West Lovington Collection Date: 3/15/2022 2:46:00 PM

Lab ID: 2203A30-008 **Matrix:** AQUEOUS **Received Date:** 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Diethyl phthalate	ND	10	μg/L	1	3/24/2022 11:32:14 PM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/24/2022 11:32:14 PM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Fluoranthene	ND	10	μg/L	1	3/24/2022 11:32:14 PM	66307
Fluorene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Isophorone	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Naphthalene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Pentachlorophenol	ND	20	μg/L	1	3/24/2022 11:32:14 PM	66307
Phenanthrene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Phenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Pyrene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Pyridine	ND	10	μg/L	1	3/24/2022 11:32:14 PM	66307

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-5

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:46:00 PMLab ID:2203A30-008Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	3/24/2022 11:32:14 PM	66307
Surr: 2-Fluorophenol	56.4	29.4-87.7	%Rec	1	3/24/2022 11:32:14 PM	66307
Surr: Phenol-d5	42.3	28.5-64.7	%Rec	1	3/24/2022 11:32:14 PM	66307
Surr: 2,4,6-Tribromophenol	72.5	18.6-129	%Rec	1	3/24/2022 11:32:14 PM	66307
Surr: Nitrobenzene-d5	68.2	36.9-103	%Rec	1	3/24/2022 11:32:14 PM	66307
Surr: 2-Fluorobiphenyl	66.8	38.1-99.9	%Rec	1	3/24/2022 11:32:14 PM	66307
Surr: 4-Terphenyl-d14	105	48-155	%Rec	1	3/24/2022 11:32:14 PM	66307
EPA METHOD 8260B: VOLATILES					Analyst	: JR
Benzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Toluene	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
Ethylbenzene	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
Naphthalene	ND	2.0		1	3/23/2022 7:38:44 PM	R86690
1-Methylnaphthalene	ND	4.0		1	3/23/2022 7:38:44 PM	R86690
2-Methylnaphthalene	ND	4.0		1	3/23/2022 7:38:44 PM	R86690
Acetone	ND	10		1	3/23/2022 7:38:44 PM	R86690
Bromobenzene	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
Bromodichloromethane	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
Bromoform	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
Bromomethane	ND	3.0		1	3/23/2022 7:38:44 PM	R86690
2-Butanone	ND	10	μg/L	1	3/23/2022 7:38:44 PM	R86690
Carbon disulfide	ND	10	μg/L	1	3/23/2022 7:38:44 PM	R86690
Carbon Tetrachloride	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Chlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Chloroethane	ND	2.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Chloroform	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Chloromethane	ND	3.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
2-Chlorotoluene	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
4-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
cis-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
cis-1,3-Dichloropropene	ND	1.0		1	3/23/2022 7:38:44 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Dibromochloromethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Hall Environmental Analysis Laboratory, Inc. Date Reported: 4/13/2022

CLIENT: CMB Environmental Client Sample ID: MW-5

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 2:46:00 PMLab ID:2203A30-008Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 7:38:44 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 7:38:44 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 7:38:44 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 7:38:44 PM	R86690
Surr: 1,2-Dichloroethane-d4	90.0	70-130	%Rec	1	3/23/2022 7:38:44 PM	R86690
Surr: 4-Bromofluorobenzene	98.1	70-130	%Rec	1	3/23/2022 7:38:44 PM	R86690
Surr: Dibromofluoromethane	96.5	70-130	%Rec	1	3/23/2022 7:38:44 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

2203A30-008

Lab ID:

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-5

Project: Energy Resources Corp West Lovington Collection Date: 3/15/2022 2:46:00 PM

Received Date: 3/18/2022 10:10:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

 EPA METHOD 8260B: VOLATILES
 Analyst: JR

 Surr: Toluene-d8
 103
 70-130
 %Rec
 1
 3/23/2022 7:38:44 PM
 R86690

Matrix: AQUEOUS

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-6

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 3:33:00 PMLab ID:2203A30-009Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	1000	50	*	mg/L	100	3/21/2022 4:15:44 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	4500	10		µmhos/c	1	3/22/2022 2:25:12 PM	R86681
•	4000	10		μιτιτοσ/ο			
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst:	
Total Dissolved Solids	2510	100	*D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
pH	8.10		Н	pH units	1	3/22/2022 2:25:12 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Aniline	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Anthracene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Azobenzene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Benzoic acid	ND	20		μg/L	1	3/25/2022 12:13:40 AM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/25/2022 12:13:40 AM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Carbazole	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Chrysene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/25/2022 12:13:40 AM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/25/2022 12:13:40 AM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/25/2022 12:13:40 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-6

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 3:33:00 PMLab ID:2203A30-009Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Diethyl phthalate	ND	10	μg/L	1	3/25/2022 12:13:40 AM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/25/2022 12:13:40 AM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Fluoranthene	ND	10	μg/L	1	3/25/2022 12:13:40 AM	66307
Fluorene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Isophorone	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Naphthalene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Pentachlorophenol	ND	20	μg/L	1	3/25/2022 12:13:40 AM	66307
Phenanthrene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Phenol	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Pyrene	ND	5.0	μg/L	1	3/25/2022 12:13:40 AM	66307
Pyridine	ND	10	μg/L	1	3/25/2022 12:13:40 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-6

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 3:33:00 PMLab ID:2203A30-009Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Uni	ts DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2,4-Trichlorobenzene	ND	5.0	μg/L	. 1	3/25/2022 12:13:40 AM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	. 1	3/25/2022 12:13:40 AM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L		3/25/2022 12:13:40 AM	66307
Surr: 2-Fluorophenol	52.6	29.4-87.7	%R	ec 1	3/25/2022 12:13:40 AM	66307
Surr: Phenol-d5	41.1	28.5-64.7	%R	ec 1	3/25/2022 12:13:40 AM	66307
Surr: 2,4,6-Tribromophenol	69.9	18.6-129	%R	ec 1	3/25/2022 12:13:40 AM	66307
Surr: Nitrobenzene-d5	62.1	36.9-103	%R	ec 1	3/25/2022 12:13:40 AM	66307
Surr: 2-Fluorobiphenyl	63.2	38.1-99.9	%R	ec 1	3/25/2022 12:13:40 AM	66307
Surr: 4-Terphenyl-d14	96.3	48-155	%R	ec 1	3/25/2022 12:13:40 AM	66307
EPA METHOD 8260B: VOLATILES					Analyst	: JR
Benzene	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Toluene	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
Ethylbenzene	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
Naphthalene	ND	2.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
1-Methylnaphthalene	ND	4.0	μg/L		3/23/2022 8:07:17 PM	R86690
2-Methylnaphthalene	ND	4.0	μg/L		3/23/2022 8:07:17 PM	R86690
Acetone	ND	10	μg/L		3/23/2022 8:07:17 PM	R86690
Bromobenzene	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Bromodichloromethane	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
Bromoform	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Bromomethane	ND	3.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
2-Butanone	ND	10	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Carbon disulfide	ND	10	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Carbon Tetrachloride	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Chlorobenzene	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Chloroethane	ND	2.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
Chloroform	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
Chloromethane	ND	3.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
2-Chlorotoluene	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
4-Chlorotoluene	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
cis-1,2-DCE	ND	1.0	μg/L	. 1	3/23/2022 8:07:17 PM	R86690
cis-1,3-Dichloropropene	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L		3/23/2022 8:07:17 PM	R86690
Dibromochloromethane	ND	1.0	μg/L		3/23/2022 8:07:17 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-6

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 3:33:00 PMLab ID:2203A30-009Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 8:07:17 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 8:07:17 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 8:07:17 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 8:07:17 PM	R86690
Surr: 1,2-Dichloroethane-d4	86.4	70-130	%Rec	1	3/23/2022 8:07:17 PM	R86690
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	3/23/2022 8:07:17 PM	R86690
Surr: Dibromofluoromethane	93.2	70-130	%Rec	1	3/23/2022 8:07:17 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-6

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 3:33:00 PMLab ID:2203A30-009Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	st: JR
Surr: Toluene-d8	98.5	70-130	%Rec	1	3/23/2022 8:07:17 PM	R86690

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

L Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-3

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 4:30:00 PMLab ID:2203A30-010Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	25	5.0		mg/L	10	3/21/2022 4:28:35 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	620	10		µmhos/c	1	3/22/2022 2:29:19 PM	R86681
•	020	10		μιτιτου/ σ	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS	550	200	*5	,,		Analyst:	
Total Dissolved Solids	550	200	*D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.61		Н	pH units	1	3/22/2022 2:29:19 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JME
Acenaphthene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Acenaphthylene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Aniline	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Anthracene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Azobenzene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Benzoic acid	ND	20		μg/L	1	4/2/2022 1:22:22 AM	66307
Benzyl alcohol	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	4/2/2022 1:22:22 AM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Carbazole	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
4-Chloroaniline	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
2-Chlorophenol	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Chrysene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	4/2/2022 1:22:22 AM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	4/2/2022 1:22:22 AM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307
Dibenzofuran	ND	5.0		μg/L	1	4/2/2022 1:22:22 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-3

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 4:30:00 PMLab ID:2203A30-010Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: JME
1,2-Dichlorobenzene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Diethyl phthalate	ND	10	μg/L	1	4/2/2022 1:22:22 AM	66307
Dimethyl phthalate	ND	10	μg/L	1	4/2/2022 1:22:22 AM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
4,6-Dinitro-2-methylphenol	ND	20	μg/L	1	4/2/2022 1:22:22 AM	66307
2,4-Dinitrophenol	ND	20	μg/L	1	4/2/2022 1:22:22 AM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Fluoranthene	ND	10	μg/L	1	4/2/2022 1:22:22 AM	66307
Fluorene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Hexachloroethane	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Isophorone	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2-Methylphenol	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Naphthalene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2-Nitroaniline	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
3-Nitroaniline	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
4-Nitroaniline	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Nitrobenzene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2-Nitrophenol	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
4-Nitrophenol	ND	10	μg/L	1	4/2/2022 1:22:22 AM	66307
Pentachlorophenol	ND	20	μg/L	1	4/2/2022 1:22:22 AM	66307
Phenanthrene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Phenol	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Pyrene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
Pyridine	ND	10	μg/L	1	4/2/2022 1:22:22 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-3

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 4:30:00 PMLab ID:2203A30-010Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: JME
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	4/2/2022 1:22:22 AM	66307
2,4,6-Trichlorophenol	ND	5.0		1	4/2/2022 1:22:22 AM	66307
Surr: 2-Fluorophenol	49.4	29.4-87.7	%Rec	1	4/2/2022 1:22:22 AM	66307
Surr: Phenol-d5	39.4	28.5-64.7	%Rec	1	4/2/2022 1:22:22 AM	66307
Surr: 2,4,6-Tribromophenol	63.5	18.6-129	%Rec	1	4/2/2022 1:22:22 AM	66307
Surr: Nitrobenzene-d5	67.4	36.9-103	%Rec	1	4/2/2022 1:22:22 AM	66307
Surr: 2-Fluorobiphenyl	63.4	38.1-99.9	%Rec	1	4/2/2022 1:22:22 AM	66307
Surr: 4-Terphenyl-d14	85.4	48-155	%Rec	1	4/2/2022 1:22:22 AM	66307
EPA METHOD 8260B: VOLATILES					Analys	st: JR
Benzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Toluene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Ethylbenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Naphthalene	ND	2.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
2-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Acetone	ND	10	μg/L	1	3/23/2022 8:35:51 PM	R86690
Bromobenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Bromodichloromethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Bromoform	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Bromomethane	ND	3.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
2-Butanone	ND	10	μg/L	1	3/23/2022 8:35:51 PM	R86690
Carbon disulfide	ND	10	μg/L	1	3/23/2022 8:35:51 PM	R86690
Carbon Tetrachloride	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Chlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Chloroethane	ND	2.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Chloroform	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Chloromethane	ND	3.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
2-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
4-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
cis-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0	1.0	1	3/23/2022 8:35:51 PM	R86690
Dibromochloromethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Hall Environmental Analysis Laboratory, Inc. Date Reported: 4/13/2022

CLIENT: CMB Environmental Client Sample ID: MW-3

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 4:30:00 PMLab ID:2203A30-010Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	:: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 8:35:51 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 8:35:51 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 8:35:51 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 8:35:51 PM	R86690
Surr: 1,2-Dichloroethane-d4	87.0	70-130	%Rec	1	3/23/2022 8:35:51 PM	R86690
Surr: 4-Bromofluorobenzene	96.2	70-130	%Rec	1	3/23/2022 8:35:51 PM	R86690
Surr: Dibromofluoromethane	91.2	70-130	%Rec	1	3/23/2022 8:35:51 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-3

Project:Energy Resources Corp West LovingtonCollection Date: 3/15/2022 4:30:00 PMLab ID:2203A30-010Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

 EPA METHOD 8260B: VOLATILES
 Analyst: JR

 Surr: Toluene-d8
 102
 70-130
 %Rec
 1
 3/23/2022 8:35:51 PM
 R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental

Client Sample ID: MW-2

Energy Resources Corp West Lovington

Collection Date: 3/16/2022 9:00:00 AM 2203A30-011 Lab ID: Matrix: AQUEOUS Received Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: LRN
Chloride	1200	50	*	mg/L	100	3/21/2022 5:07:10 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst	MRA
Conductivity	4900	10		µmhos/c	- 1	3/22/2022 2:39:47 PM	R86681
•	4300	10		μιτιτίοσ/ο	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst	
Total Dissolved Solids	2930	200	*D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst	MRA
рН	7.55		Н	pH units	1	3/22/2022 2:39:47 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst	: JME
Acenaphthene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Acenaphthylene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Aniline	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Anthracene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Azobenzene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Benzoic acid	ND	20		μg/L	1	4/2/2022 2:03:23 AM	66307
Benzyl alcohol	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	4/2/2022 2:03:23 AM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Carbazole	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
4-Chloroaniline	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
2-Chlorophenol	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Chrysene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	4/2/2022 2:03:23 AM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	4/2/2022 2:03:23 AM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307
Dibenzofuran	ND	5.0		μg/L	1	4/2/2022 2:03:23 AM	66307

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference
- Analyte detected in the associated Method Blank
- Е Estimated value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-2

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:00:00 AMLab ID:2203A30-011Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: JME
1,2-Dichlorobenzene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Diethyl phthalate	ND	10	μg/L	1	4/2/2022 2:03:23 AM	66307
Dimethyl phthalate	ND	10	μg/L	1	4/2/2022 2:03:23 AM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
4,6-Dinitro-2-methylphenol	ND	20	μg/L	1	4/2/2022 2:03:23 AM	66307
2,4-Dinitrophenol	ND	20	μg/L	1	4/2/2022 2:03:23 AM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Fluoranthene	ND	10	μg/L	1	4/2/2022 2:03:23 AM	66307
Fluorene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Hexachloroethane	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Isophorone	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2-Methylphenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Naphthalene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2-Nitroaniline	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
3-Nitroaniline	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
4-Nitroaniline	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Nitrobenzene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2-Nitrophenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
4-Nitrophenol	ND	10	μg/L	1	4/2/2022 2:03:23 AM	66307
Pentachlorophenol	ND	20	μg/L	1	4/2/2022 2:03:23 AM	66307
Phenanthrene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Phenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Pyrene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Pyridine	ND	10	μg/L	1	4/2/2022 2:03:23 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-2

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:00:00 AMLab ID:2203A30-011Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: JME
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	4/2/2022 2:03:23 AM	66307
Surr: 2-Fluorophenol	46.9	29.4-87.7	%Rec	1	4/2/2022 2:03:23 AM	66307
Surr: Phenol-d5	38.4	28.5-64.7	%Rec	1	4/2/2022 2:03:23 AM	66307
Surr: 2,4,6-Tribromophenol	57.0	18.6-129	%Rec	1	4/2/2022 2:03:23 AM	66307
Surr: Nitrobenzene-d5	60.3	36.9-103	%Rec	1	4/2/2022 2:03:23 AM	66307
Surr: 2-Fluorobiphenyl	55.6	38.1-99.9	%Rec	1	4/2/2022 2:03:23 AM	66307
Surr: 4-Terphenyl-d14	91.6	48-155	%Rec	1	4/2/2022 2:03:23 AM	66307
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Benzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Toluene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
Ethylbenzene	ND	1.0	. •	1	3/23/2022 9:04:26 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
Naphthalene	ND	2.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
2-Methylnaphthalene	ND	4.0		1	3/23/2022 9:04:26 PM	R86690
Acetone	ND	10	μg/L	1	3/23/2022 9:04:26 PM	R86690
Bromobenzene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
Bromodichloromethane	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
Bromoform	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Bromomethane	ND	3.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
2-Butanone	ND	10	μg/L	1	3/23/2022 9:04:26 PM	R86690
Carbon disulfide	ND	10	μg/L	1	3/23/2022 9:04:26 PM	R86690
Carbon Tetrachloride	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Chlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Chloroethane	ND	2.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Chloroform	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Chloromethane	ND	3.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
2-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
4-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
cis-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Dibromochloromethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-2

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:00:00 AMLab ID:2203A30-011Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,3-Dichlorobenzene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Hexachlorobutadiene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 9:04:26 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
4-Isopropyltoluene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 9:04:26 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
sec-Butylbenzene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
Styrene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
tert-Butylbenzene	ND	1.0		1	3/23/2022 9:04:26 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0		1	3/23/2022 9:04:26 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 9:04:26 PM	R86690
Xylenes, Total	ND	1.5		1	3/23/2022 9:04:26 PM	R86690
Surr: 1,2-Dichloroethane-d4	89.5	70-130	%Rec	1	3/23/2022 9:04:26 PM	R86690
Surr: 4-Bromofluorobenzene	99.1	70-130	%Rec	1	3/23/2022 9:04:26 PM	R86690
Surr: Dibromofluoromethane	94.3	70-130	%Rec	1	3/23/2022 9:04:26 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-2

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:00:00 AMLab ID:2203A30-011Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: JR
Surr: Toluene-d8	107	70-130	%Rec	1	3/23/2022 9:04:26 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-4

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:40:00 AMLab ID:2203A30-012Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	LRN
Chloride	230	50		mg/L	100	3/21/2022 5:32:54 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst	MRA
Conductivity	1600	10		µmhos/c	1	3/22/2022 2:44:17 PM	R86681
•	1000	10		μιτιτου/ο			
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst	
Total Dissolved Solids	1100	200	*D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst	MRA
рН	7.45		Н	pH units	1	3/22/2022 2:44:17 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst	DAM
Acenaphthene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Aniline	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Anthracene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Azobenzene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Benzoic acid	ND	20		μg/L	1	3/25/2022 2:17:27 AM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/25/2022 2:17:27 AM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Carbazole	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Chrysene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/25/2022 2:17:27 AM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/25/2022 2:17:27 AM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/25/2022 2:17:27 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-4

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:40:00 AMLab ID:2203A30-012Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Diethyl phthalate	ND	10	μg/L	1	3/25/2022 2:17:27 AM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/25/2022 2:17:27 AM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Fluoranthene	ND	10	μg/L	1	3/25/2022 2:17:27 AM	66307
Fluorene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Isophorone	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Naphthalene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Pentachlorophenol	ND	20	μg/L	1	3/25/2022 2:17:27 AM	66307
Phenanthrene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Phenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Pyrene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Pyridine	ND	10	μg/L	1	3/25/2022 2:17:27 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-4

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:40:00 AMLab ID:2203A30-012Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: DAM
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	3/25/2022 2:17:27 AM	66307
Surr: 2-Fluorophenol	58.1	29.4-87.7	%Rec	1	3/25/2022 2:17:27 AM	66307
Surr: Phenol-d5	45.4	28.5-64.7	%Red	1	3/25/2022 2:17:27 AM	66307
Surr: 2,4,6-Tribromophenol	71.9	18.6-129	%Red	1	3/25/2022 2:17:27 AM	66307
Surr: Nitrobenzene-d5	70.0	36.9-103	%Rec	1	3/25/2022 2:17:27 AM	66307
Surr: 2-Fluorobiphenyl	70.9	38.1-99.9	%Rec	1	3/25/2022 2:17:27 AM	66307
Surr: 4-Terphenyl-d14	101	48-155	%Rec	1	3/25/2022 2:17:27 AM	66307
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Benzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Toluene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Ethylbenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Naphthalene	ND	2.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
2-Methylnaphthalene	ND	4.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Acetone	ND	10	μg/L	1	3/23/2022 9:32:57 PM	R86690
Bromobenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Bromodichloromethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Bromoform	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Bromomethane	ND	3.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
2-Butanone	ND	10	μg/L	1	3/23/2022 9:32:57 PM	R86690
Carbon disulfide	ND	10	μg/L	1	3/23/2022 9:32:57 PM	R86690
Carbon Tetrachloride	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Chlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Chloroethane	ND	2.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Chloroform	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Chloromethane	ND	3.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
2-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
4-Chlorotoluene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
cis-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Dibromochloromethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-4

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 9:40:00 AMLab ID:2203A30-012Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,1-Dichloroethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,1-Dichloroethene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,3-Dichloropropane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
2,2-Dichloropropane	ND	2.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,1-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Hexachlorobutadiene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
2-Hexanone	ND	10	μg/L	1	3/23/2022 9:32:57 PM	R86690
Isopropylbenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
4-Isopropyltoluene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
4-Methyl-2-pentanone	ND	10	μg/L	1	3/23/2022 9:32:57 PM	R86690
Methylene Chloride	ND	3.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
n-Butylbenzene	ND	3.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
n-Propylbenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
sec-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Styrene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
tert-Butylbenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
trans-1,2-DCE	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Trichlorofluoromethane	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Vinyl chloride	ND	1.0	μg/L	1	3/23/2022 9:32:57 PM	R86690
Xylenes, Total	ND	1.5	μg/L	1	3/23/2022 9:32:57 PM	R86690
Surr: 1,2-Dichloroethane-d4	87.5	70-130	%Rec	1	3/23/2022 9:32:57 PM	R86690
Surr: 4-Bromofluorobenzene	97.8	70-130	%Rec	1	3/23/2022 9:32:57 PM	R86690
Surr: Dibromofluoromethane	90.1	70-130	%Rec	1	3/23/2022 9:32:57 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-4

Project: Energy Resources Corp West Lovington Collection Date: 3/16/2022 9:40:00 AM 2203A30-012 Lab ID: Matrix: AQUEOUS Received Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: JR
Surr: Toluene-d8	101	70-130	%Rec	1	3/23/2022 9:32:57 PM	R86690

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference

Analyte detected in the associated Method Blank

Е Estimated value

Analyte detected below quantitation limits

Sample pH Not In Range

Page 48 of 100 RL Reporting Limit

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 10:30:00 AMLab ID:2203A30-013Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	20	5.0		mg/L	10	3/21/2022 6:11:31 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	570	10		µmhos/c	1	3/22/2022 2:48:50 PM	R86681
•	0.0	10		μιτιτοο/ο	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS	470	200	_	4		Analyst:	
Total Dissolved Solids	470	200	D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.76		Н	pH units	1	3/22/2022 2:48:50 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Aniline	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Anthracene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Azobenzene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Benzoic acid	ND	20		μg/L	1	3/25/2022 2:58:55 AM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/25/2022 2:58:55 AM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Carbazole	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Chrysene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/25/2022 2:58:55 AM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/25/2022 2:58:55 AM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/25/2022 2:58:55 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 10:30:00 AMLab ID:2203A30-013Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Diethyl phthalate	ND	10	μg/L	1	3/25/2022 2:58:55 AM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/25/2022 2:58:55 AM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Fluoranthene	ND	10	μg/L	1	3/25/2022 2:58:55 AM	66307
Fluorene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Isophorone	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Naphthalene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Pentachlorophenol	ND	20	μg/L	1	3/25/2022 2:58:55 AM	66307
Phenanthrene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Phenol	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Pyrene	ND	5.0	μg/L	1	3/25/2022 2:58:55 AM	66307
Pyridine	ND	10	μg/L	1	3/25/2022 2:58:55 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 10:30:00 AMLab ID:2203A30-013Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Uni	ts DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: DAM
1,2,4-Trichlorobenzene	ND	5.0	μg/L	. 1	3/25/2022 2:58:55 AM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	. 1	3/25/2022 2:58:55 AM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L	. 1	3/25/2022 2:58:55 AM	66307
Surr: 2-Fluorophenol	54.6	29.4-87.7	%R	ec 1	3/25/2022 2:58:55 AM	66307
Surr: Phenol-d5	41.7	28.5-64.7	%R	ec 1	3/25/2022 2:58:55 AM	66307
Surr: 2,4,6-Tribromophenol	72.3	18.6-129	%R	ec 1	3/25/2022 2:58:55 AM	66307
Surr: Nitrobenzene-d5	65.3	36.9-103	%R	ec 1	3/25/2022 2:58:55 AM	66307
Surr: 2-Fluorobiphenyl	64.2	38.1-99.9	%R	ec 1	3/25/2022 2:58:55 AM	66307
Surr: 4-Terphenyl-d14	98.3	48-155	%R	ec 1	3/25/2022 2:58:55 AM	66307
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Benzene	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Toluene	ND	2.0	μg/L		3/23/2022 10:01:24 PM	
Ethylbenzene	ND	2.0	μg/L		3/23/2022 10:01:24 PM	R86690
Methyl tert-butyl ether (MTBE)	ND	2.0	μg/L		3/23/2022 10:01:24 PM	
1,2,4-Trimethylbenzene	ND	2.0	μg/L		3/23/2022 10:01:24 PM	R86690
1,3,5-Trimethylbenzene	ND	2.0	μg/L		3/23/2022 10:01:24 PM	R86690
1,2-Dichloroethane (EDC)	ND	2.0	μg/L		3/23/2022 10:01:24 PM	R86690
1,2-Dibromoethane (EDB)	ND	2.0	μg/L		3/23/2022 10:01:24 PM	R86690
Naphthalene	ND	4.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
1-Methylnaphthalene	ND	8.0	μg/L		3/23/2022 10:01:24 PM	R86690
2-Methylnaphthalene	ND	8.0	μg/L		3/23/2022 10:01:24 PM	R86690
Acetone	ND	20	μg/L		3/23/2022 10:01:24 PM	R86690
Bromobenzene	ND	2.0	μg/L		3/23/2022 10:01:24 PM	R86690
Bromodichloromethane	ND	2.0	μg/L		3/23/2022 10:01:24 PM	R86690
Bromoform	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Bromomethane	ND	6.0	μg/L		3/23/2022 10:01:24 PM	R86690
2-Butanone	ND	20	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Carbon disulfide	ND	20	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Carbon Tetrachloride	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Chlorobenzene	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Chloroethane	ND	4.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Chloroform	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
Chloromethane	ND	6.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
2-Chlorotoluene	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
4-Chlorotoluene	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
cis-1,2-DCE	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
cis-1,3-Dichloropropene	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690
1,2-Dibromo-3-chloropropane	ND	4.0	μg/L		3/23/2022 10:01:24 PM	R86690
Dibromochloromethane	ND	2.0	μg/L	. 2	3/23/2022 10:01:24 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 10:30:00 AMLab ID:2203A30-013Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: JR
Dibromomethane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,2-Dichlorobenzene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
1,3-Dichlorobenzene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
1,4-Dichlorobenzene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
Dichlorodifluoromethane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,1-Dichloroethane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,1-Dichloroethene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
1,2-Dichloropropane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,3-Dichloropropane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
2,2-Dichloropropane	ND	4.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,1-Dichloropropene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
Hexachlorobutadiene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
2-Hexanone	ND	20	μg/L	2	3/23/2022 10:01:24 PM	R86690
Isopropylbenzene	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
4-Isopropyltoluene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
4-Methyl-2-pentanone	ND	20	μg/L	2	3/23/2022 10:01:24 PM	R86690
Methylene Chloride	ND	6.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
n-Butylbenzene	ND	6.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
n-Propylbenzene	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
sec-Butylbenzene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
Styrene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
tert-Butylbenzene	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
1,1,1,2-Tetrachloroethane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,1,2,2-Tetrachloroethane	ND	4.0		2	3/23/2022 10:01:24 PM	R86690
Tetrachloroethene (PCE)	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
trans-1,2-DCE	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
trans-1,3-Dichloropropene	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,2,3-Trichlorobenzene	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,2,4-Trichlorobenzene	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,1,1-Trichloroethane	ND	2.0		2	3/23/2022 10:01:24 PM	R86690
1,1,2-Trichloroethane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
Trichloroethene (TCE)	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
Trichlorofluoromethane	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
1,2,3-Trichloropropane	ND	4.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
Vinyl chloride	ND	2.0	μg/L	2	3/23/2022 10:01:24 PM	R86690
Xylenes, Total	ND	3.0		2	3/23/2022 10:01:24 PM	R86690
Surr: 1,2-Dichloroethane-d4	93.7	70-130	%Rec	2	3/23/2022 10:01:24 PM	R86690
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	2	3/23/2022 10:01:24 PM	R86690
Surr: Dibromofluoromethane	95.8	70-130	%Rec	2	3/23/2022 10:01:24 PM	R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-8S

Project: Energy Resources Corp West Lovington

Collection Date: 3/16/2022 10:30:00 AM

Lab ID: 2203A30-013 **Matrix:** AQUEOUS **Received Date:** 3/18/2022 10:10:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: JR
Surr: Toluene-d8	99.5	70-130	%Rec	2	3/23/2022 10:01:24 PM	/ R86690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-8M

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 11:23:00 AMLab ID:2203A30-014Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	46	5.0		mg/L	10	3/21/2022 6:37:15 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	920	10		µmhos/c	1	3/22/2022 2:57:27 PM	R86681
•	020	10		piriirioo/o	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst:	
Total Dissolved Solids	610	40.0	*D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.50		Н	pH units	1	3/22/2022 2:57:27 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Aniline	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Anthracene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Azobenzene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Benzoic acid	ND	20		μg/L	1	3/25/2022 3:39:38 AM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/25/2022 3:39:38 AM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Carbazole	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Chrysene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/25/2022 3:39:38 AM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/25/2022 3:39:38 AM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/25/2022 3:39:38 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8M

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 11:23:00 AMLab ID:2203A30-014Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Diethyl phthalate	ND	10	μg/L	1	3/25/2022 3:39:38 AM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/25/2022 3:39:38 AM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Fluoranthene	ND	10	μg/L	1	3/25/2022 3:39:38 AM	66307
Fluorene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Isophorone	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Naphthalene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Pentachlorophenol	ND	20	μg/L	1	3/25/2022 3:39:38 AM	66307
Phenanthrene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Phenol	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Pyrene	ND	5.0	μg/L	1	3/25/2022 3:39:38 AM	66307
Pyridine	ND	10	μg/L	1	3/25/2022 3:39:38 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-8M

Project: Energy Resources Corp West Lovington Collection Date: 3/16/2022 11:23:00 AM

Lab ID: 2203A30-014 Matrix: AQUEOUS Received Date: 3/18/2022 10:10:00 AM

Result **RL Qual Units DF** Date Analyzed Analyses **Batch EPA METHOD 8270C: SEMIVOLATILES** Analyst: DAM ND 3/25/2022 3:39:38 AM 1.2.4-Trichlorobenzene 5.0 μg/L 1 66307 2,4,5-Trichlorophenol ND 5.0 μg/L 1 3/25/2022 3:39:38 AM 66307 ND 5.0 2,4,6-Trichlorophenol μg/L 1 3/25/2022 3:39:38 AM 66307 Surr: 2-Fluorophenol S %Rec 23.7 29.4-87.7 1 3/25/2022 3:39:38 AM 66307 Surr: Phenol-d5 26.3 28.5-64.7 S %Rec 1 3/25/2022 3:39:38 AM 66307 Surr: 2.4.6-Tribromophenol 27.3 18.6-129 %Rec 1 3/25/2022 3:39:38 AM 66307 Surr: Nitrobenzene-d5 S 1 28.7 36.9-103 %Rec 3/25/2022 3:39:38 AM 66307 Surr: 2-Fluorobiphenvl 25.2 38.1-99.9 S %Rec 1 3/25/2022 3:39:38 AM 66307 Surr: 4-Terphenyl-d14 96.7 48-155 %Rec 1 3/25/2022 3:39:38 AM 66307 **EPA METHOD 8260B: VOLATILES** Analyst: JR 3/28/2022 6:46:22 PM Benzene ND 1.0 µg/L 1 R86782 Toluene ND 1 3/28/2022 6:46:22 PM 1.0 µg/L R86782 Ethylbenzene ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 Methyl tert-butyl ether (MTBE) ND 1.0 μg/L 1 3/28/2022 6:46:22 PM R86782 1,2,4-Trimethylbenzene ND 1.0 1 3/28/2022 6:46:22 PM R86782 μg/L 1,3,5-Trimethylbenzene ND 3/28/2022 6:46:22 PM R86782 1.0 µg/L ND 1,2-Dichloroethane (EDC) 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 1,2-Dibromoethane (EDB) ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 Naphthalene ND 2.0 1 3/28/2022 6:46:22 PM µg/L R86782 1-Methylnaphthalene ND 4.0 µg/L 1 3/28/2022 6:46:22 PM R86782 ND 2-Methylnaphthalene 4.0 µg/L 1 3/28/2022 6:46:22 PM R86782 Acetone ND 10 µg/L 1 3/28/2022 6:46:22 PM R86782 Bromobenzene ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 Bromodichloromethane ND 1.0 1 3/28/2022 6:46:22 PM µg/L R86782 Bromoform ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 **Bromomethane** ND 3.0 1 3/28/2022 6:46:22 PM µg/L R86782 ND 10 3/28/2022 6:46:22 PM R86782 2-Butanone µg/L ND Carbon disulfide 10 µg/L 1 3/28/2022 6:46:22 PM R86782 Carbon Tetrachloride ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 Chlorobenzene ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 Chloroethane ND 2.0 µg/L 1 3/28/2022 6:46:22 PM R86782 ND Chloroform 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 Chloromethane ND 3.0 μg/L 1 3/28/2022 6:46:22 PM R86782 2-Chlorotoluene ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 4-Chlorotoluene ND 1.0 3/28/2022 6:46:22 PM µg/L 1 R86782 cis-1,2-DCE ND 1.0 µg/L 1 3/28/2022 6:46:22 PM R86782 cis-1,3-Dichloropropene ND 1.0 μg/L 1 3/28/2022 6:46:22 PM R86782 1,2-Dibromo-3-chloropropane ND 2.0 μg/L 1 3/28/2022 6:46:22 PM R86782 Dibromochloromethane ND 1.0 3/28/2022 6:46:22 PM R86782 µg/L

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Rang
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8M

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 11:23:00 AMLab ID:2203A30-014Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,1-Dichloroethane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,1-Dichloroethene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,2-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,3-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
2,2-Dichloropropane	ND	2.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,1-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Hexachlorobutadiene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
2-Hexanone	ND	10	μg/L	1	3/28/2022 6:46:22 PM	R86782
Isopropylbenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
4-Isopropyltoluene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
4-Methyl-2-pentanone	ND	10	μg/L	1	3/28/2022 6:46:22 PM	R86782
Methylene Chloride	ND	3.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
n-Butylbenzene	ND	3.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
n-Propylbenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
sec-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Styrene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
tert-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
trans-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Trichlorofluoromethane	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Vinyl chloride	ND	1.0	μg/L	1	3/28/2022 6:46:22 PM	R86782
Xylenes, Total	ND	1.5	μg/L	1	3/28/2022 6:46:22 PM	R86782
Surr: 1,2-Dichloroethane-d4	88.7	70-130	%Rec	1	3/28/2022 6:46:22 PM	R86782
Surr: 4-Bromofluorobenzene	94.4	70-130	%Rec	1	3/28/2022 6:46:22 PM	R86782
Surr: Dibromofluoromethane	93.9	70-130	%Rec	1	3/28/2022 6:46:22 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/13/2022

CLIENT: CMB Environmental Client Sample ID: MW-8M

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 11:23:00 AMLab ID:2203A30-014Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: JR
Surr: Toluene-d8	101	70-130	%Rec	1	3/28/2022 6:46:22 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 2:05:00 PMLab ID:2203A30-015Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	40	5.0		mg/L	10	3/21/2022 7:02:58 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	780	10		µmhos/c	1	3/22/2022 3:01:58 PM	R86681
•	.00	10		μιτιτου/ σ	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS			_			Analyst:	
Total Dissolved Solids	488	40.0	D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.80		Н	pH units	1	3/22/2022 3:01:58 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	DAM
Acenaphthene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Acenaphthylene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Aniline	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Anthracene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Azobenzene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Benz(a)anthracene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Benzo(a)pyrene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Benzo(b)fluoranthene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Benzo(k)fluoranthene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Benzoic acid	ND	20		μg/L	1	3/25/2022 4:20:49 AM	66307
Benzyl alcohol	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	3/25/2022 4:20:49 AM	66307
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Butyl benzyl phthalate	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Carbazole	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
4-Chloroaniline	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
2-Chloronaphthalene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
2-Chlorophenol	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Chrysene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Di-n-butyl phthalate	ND	10		μg/L	1	3/25/2022 4:20:49 AM	66307
Di-n-octyl phthalate	ND	20		μg/L	1	3/25/2022 4:20:49 AM	66307
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307
Dibenzofuran	ND	5.0		μg/L	1	3/25/2022 4:20:49 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 2:05:00 PMLab ID:2203A30-015Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analyst	: DAM
1,2-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
1,3-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
1,4-Dichlorobenzene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
3,3'-Dichlorobenzidine	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Diethyl phthalate	ND	10	μg/L	1	3/25/2022 4:20:49 AM	66307
Dimethyl phthalate	ND	10	μg/L	1	3/25/2022 4:20:49 AM	66307
2,4-Dichlorophenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2,4-Dimethylphenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
4,6-Dinitro-2-methylphenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2,4-Dinitrophenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2,4-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2,6-Dinitrotoluene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Fluoranthene	ND	10	μg/L	1	3/25/2022 4:20:49 AM	66307
Fluorene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Hexachlorobenzene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Hexachlorobutadiene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Hexachloroethane	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Isophorone	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
1-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2-Methylnaphthalene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2-Methylphenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
3+4-Methylphenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
N-Nitrosodimethylamine	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Naphthalene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
3-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
4-Nitroaniline	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Nitrobenzene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
4-Nitrophenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Pentachlorophenol	ND	20	μg/L	1	3/25/2022 4:20:49 AM	66307
Phenanthrene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Phenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Pyrene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Pyridine	ND	10	μg/L	1	3/25/2022 4:20:49 AM	66307

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 2:05:00 PMLab ID:2203A30-015Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	S DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: DAM
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	3/25/2022 4:20:49 AM	66307
Surr: 2-Fluorophenol	36.6	29.4-87.7	%Red	: 1	3/25/2022 4:20:49 AM	66307
Surr: Phenol-d5	30.1	28.5-64.7	%Red	: 1	3/25/2022 4:20:49 AM	66307
Surr: 2,4,6-Tribromophenol	74.8	18.6-129	%Red	: 1	3/25/2022 4:20:49 AM	66307
Surr: Nitrobenzene-d5	43.5	36.9-103	%Red	: 1	3/25/2022 4:20:49 AM	66307
Surr: 2-Fluorobiphenyl	40.5	38.1-99.9	%Red	: 1	3/25/2022 4:20:49 AM	66307
Surr: 4-Terphenyl-d14	96.8	48-155	%Red	: 1	3/25/2022 4:20:49 AM	66307
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Benzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Toluene	ND	1.0		1	3/28/2022 8:11:54 PM	R86782
Ethylbenzene	ND	1.0		1	3/28/2022 8:11:54 PM	R86782
Methyl tert-butyl ether (MTBE)	ND	1.0		1	3/28/2022 8:11:54 PM	R86782
1,2,4-Trimethylbenzene	ND	1.0		1	3/28/2022 8:11:54 PM	R86782
1,3,5-Trimethylbenzene	ND	1.0	. •	1	3/28/2022 8:11:54 PM	R86782
1,2-Dichloroethane (EDC)	ND	1.0	. 0	1	3/28/2022 8:11:54 PM	R86782
1,2-Dibromoethane (EDB)	ND	1.0	. •	1	3/28/2022 8:11:54 PM	R86782
Naphthalene	ND	2.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1-Methylnaphthalene	ND	4.0		1	3/28/2022 8:11:54 PM	R86782
2-Methylnaphthalene	ND	4.0		1	3/28/2022 8:11:54 PM	R86782
Acetone	ND	10		1	3/28/2022 8:11:54 PM	R86782
Bromobenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Bromodichloromethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Bromoform	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Bromomethane	ND	3.0		1	3/28/2022 8:11:54 PM	R86782
2-Butanone	ND	10	μg/L	1	3/28/2022 8:11:54 PM	R86782
Carbon disulfide	ND	10	μg/L	1	3/28/2022 8:11:54 PM	R86782
Carbon Tetrachloride	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Chlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Chloroethane	ND	2.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Chloroform	ND	1.0		1	3/28/2022 8:11:54 PM	R86782
Chloromethane	ND	3.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
2-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
4-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
cis-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
cis-1,3-Dichloropropene	ND	1.0		1	3/28/2022 8:11:54 PM	R86782
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Dibromochloromethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-8D

Project: Energy Resources Corp West Lovington Collection Date: 3/16/2022 2:05:00 PM

Lab ID: 2203A30-015 **Matrix:** AQUEOUS **Received Date:** 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,1-Dichloroethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,1-Dichloroethene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,2-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,3-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
2,2-Dichloropropane	ND	2.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,1-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Hexachlorobutadiene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
2-Hexanone	ND	10	μg/L	1	3/28/2022 8:11:54 PM	R86782
Isopropylbenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
4-Isopropyltoluene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
4-Methyl-2-pentanone	ND	10	μg/L	1	3/28/2022 8:11:54 PM	R86782
Methylene Chloride	ND	3.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
n-Butylbenzene	ND	3.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
n-Propylbenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
sec-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Styrene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
tert-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
trans-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Trichlorofluoromethane	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Vinyl chloride	ND	1.0	μg/L	1	3/28/2022 8:11:54 PM	R86782
Xylenes, Total	ND	1.5	μg/L	1	3/28/2022 8:11:54 PM	R86782
Surr: 1,2-Dichloroethane-d4	88.7	70-130	%Rec	1	3/28/2022 8:11:54 PM	R86782
Surr: 4-Bromofluorobenzene	98.5	70-130	%Rec	1	3/28/2022 8:11:54 PM	R86782
Surr: Dibromofluoromethane	95.8	70-130	%Rec	1	3/28/2022 8:11:54 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-8D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 2:05:00 PMLab ID:2203A30-015Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: JR
Surr: Toluene-d8	99.1	70-130	%Rec	1	3/28/2022 8:11:54 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 3:05:00 PMLab ID:2203A30-016Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	38	5.0		mg/L	10	3/21/2022 7:28:40 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	700	10		µmhos/c	1	3/22/2022 3:06:33 PM	R86681
•	700	10		piriirioo/o	•		
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst:	
Total Dissolved Solids	550	200	*D	mg/L	1	3/24/2022 10:56:00 AM	66320
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.61		Н	pH units	1	3/22/2022 3:06:33 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JME
Acenaphthene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Acenaphthylene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Aniline	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Anthracene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Azobenzene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Benz(a)anthracene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Benzo(a)pyrene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Benzo(b)fluoranthene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Benzo(k)fluoranthene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Benzoic acid	ND	20		μg/L	1	4/1/2022 6:17:41 PM	66325
Benzyl alcohol	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	4/1/2022 6:17:41 PM	66325
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Butyl benzyl phthalate	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Carbazole	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
4-Chloroaniline	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
2-Chloronaphthalene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
2-Chlorophenol	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Chrysene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Di-n-butyl phthalate	ND	10		μg/L	1	4/1/2022 6:17:41 PM	66325
Di-n-octyl phthalate	ND	20		μg/L	1	4/1/2022 6:17:41 PM	66325
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325
Dibenzofuran	ND	5.0		μg/L	1	4/1/2022 6:17:41 PM	66325

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: CMB Environmental

Analytical Report

Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-7S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 3:05:00 PMLab ID:2203A30-016Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Result **RL Qual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 8270C: SEMIVOLATILES** Analyst: JME μg/L ND 1.2-Dichlorobenzene 5.0 1 4/1/2022 6:17:41 PM 66325 1,3-Dichlorobenzene ND 5.0 μg/L 4/1/2022 6:17:41 PM 66325 ND 5.0 1,4-Dichlorobenzene μg/L 1 4/1/2022 6:17:41 PM 66325 3,3'-Dichlorobenzidine ND 5.0 μg/L 1 4/1/2022 6:17:41 PM 66325 Diethyl phthalate ND 10 1 4/1/2022 6:17:41 PM 66325 µg/L Dimethyl phthalate ND 10 µg/L 1 4/1/2022 6:17:41 PM 66325 ND 5.0 2,4-Dichlorophenol µg/L 1 4/1/2022 6:17:41 PM 66325 2,4-Dimethylphenol ND 5.0 μg/L 1 4/1/2022 6:17:41 PM 66325 4,6-Dinitro-2-methylphenol ND 20 μg/L 1 4/1/2022 6:17:41 PM 66325 2,4-Dinitrophenol ND 20 4/1/2022 6:17:41 PM 66325 μg/L 1 2,4-Dinitrotoluene ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 2.6-Dinitrotoluene ND 5.0 μg/L 1 4/1/2022 6:17:41 PM 66325 Fluoranthene ND 10 1 4/1/2022 6:17:41 PM 66325 µg/L Fluorene NΠ 5.0 1 4/1/2022 6:17:41 PM μg/L 66325 Hexachlorobenzene ND 5.0 μg/L 1 4/1/2022 6:17:41 PM 66325 Hexachlorobutadiene ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 Hexachlorocyclopentadiene ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 Hexachloroethane ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 ND 5.0 Indeno(1,2,3-cd)pyrene µg/L 1 4/1/2022 6:17:41 PM 66325 Isophorone ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 ND 1-Methylnaphthalene 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 2-Methylnaphthalene ND 5.0 4/1/2022 6:17:41 PM 66325 µg/L 1 2-Methylphenol ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 4/1/2022 6:17:41 PM 3+4-Methylphenol ND 5.0 µg/L 1 66325 N-Nitrosodi-n-propylamine ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 N-Nitrosodimethylamine ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 N-Nitrosodiphenylamine ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 Naphthalene ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 2-Nitroaniline ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 ND 5.0 1 3-Nitroaniline µg/L 4/1/2022 6:17:41 PM 66325 4-Nitroaniline ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 Nitrobenzene ND 5.0 μg/L 1 4/1/2022 6:17:41 PM 66325 2-Nitrophenol ND 5.0 µg/L 4/1/2022 6:17:41 PM 66325 4-Nitrophenol ND 10 µg/L 1 4/1/2022 6:17:41 PM 66325 Pentachlorophenol 20 ND µg/L 1 4/1/2022 6:17:41 PM 66325 Phenanthrene ND 5.0 1 4/1/2022 6:17:41 PM 66325 μg/L Phenol ND 5.0 µg/L 1 4/1/2022 6:17:41 PM 66325 Pyrene ND 5.0 μg/L 1 4/1/2022 6:17:41 PM 66325 Pyridine ND 10 μg/L 4/1/2022 6:17:41 PM 66325

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Rang
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 3:05:00 PMLab ID:2203A30-016Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: JME
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	4/1/2022 6:17:41 PM	66325
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	4/1/2022 6:17:41 PM	66325
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	4/1/2022 6:17:41 PM	66325
Surr: 2-Fluorophenol	48.7	29.4-87.7	%Rec	1	4/1/2022 6:17:41 PM	66325
Surr: Phenol-d5	37.1	28.5-64.7	%Rec	1	4/1/2022 6:17:41 PM	66325
Surr: 2,4,6-Tribromophenol	57.1	18.6-129	%Rec	1	4/1/2022 6:17:41 PM	66325
Surr: Nitrobenzene-d5	58.3	36.9-103	%Rec	1	4/1/2022 6:17:41 PM	66325
Surr: 2-Fluorobiphenyl	58.6	38.1-99.9	%Rec	1	4/1/2022 6:17:41 PM	66325
Surr: 4-Terphenyl-d14	78.3	48-155	%Rec	1	4/1/2022 6:17:41 PM	66325
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Benzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Toluene	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
Ethylbenzene	ND	1.0	. •	1	3/28/2022 8:40:33 PM	R86782
Methyl tert-butyl ether (MTBE)	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
1,2,4-Trimethylbenzene	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
1,3,5-Trimethylbenzene	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
1,2-Dichloroethane (EDC)	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
1,2-Dibromoethane (EDB)	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
Naphthalene	ND	2.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1-Methylnaphthalene	ND	4.0		1	3/28/2022 8:40:33 PM	R86782
2-Methylnaphthalene	ND	4.0		1	3/28/2022 8:40:33 PM	R86782
Acetone	ND	10		1	3/28/2022 8:40:33 PM	R86782
Bromobenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Bromodichloromethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Bromoform	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Bromomethane	ND	3.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
2-Butanone	ND	10	μg/L	1	3/28/2022 8:40:33 PM	R86782
Carbon disulfide	ND	10	μg/L	1	3/28/2022 8:40:33 PM	R86782
Carbon Tetrachloride	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Chlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Chloroethane	ND	2.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Chloroform	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
Chloromethane	ND	3.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
2-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
4-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
cis-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
cis-1,3-Dichloropropene	ND	1.0		1	3/28/2022 8:40:33 PM	R86782
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Dibromochloromethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 3:05:00 PMLab ID:2203A30-016Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,1-Dichloroethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,1-Dichloroethene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,2-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,3-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
2,2-Dichloropropane	ND	2.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,1-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Hexachlorobutadiene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
2-Hexanone	ND	10	μg/L	1	3/28/2022 8:40:33 PM	R86782
Isopropylbenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
4-Isopropyltoluene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
4-Methyl-2-pentanone	ND	10	μg/L	1	3/28/2022 8:40:33 PM	R86782
Methylene Chloride	ND	3.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
n-Butylbenzene	ND	3.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
n-Propylbenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
sec-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Styrene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
tert-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
trans-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Trichlorofluoromethane	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Vinyl chloride	ND	1.0	μg/L	1	3/28/2022 8:40:33 PM	R86782
Xylenes, Total	ND	1.5	μg/L	1	3/28/2022 8:40:33 PM	R86782
Surr: 1,2-Dichloroethane-d4	88.2	70-130	%Rec	1	3/28/2022 8:40:33 PM	R86782
Surr: 4-Bromofluorobenzene	93.9	70-130	%Rec	1	3/28/2022 8:40:33 PM	R86782
Surr: Dibromofluoromethane	94.4	70-130	%Rec	1	3/28/2022 8:40:33 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7S

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 3:05:00 PMLab ID:2203A30-016Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	st: JR
Surr: Toluene-d8	99.7	70-130	%Rec	1	3/28/2022 8:40:33 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 4:25:00 PMLab ID:2203A30-017Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	LRN
Chloride	34	5.0		mg/L	10	3/21/2022 7:54:23 PM	R86662
SM2510B: SPECIFIC CONDUCTANCE						Analyst:	MRA
Conductivity	640	10		µmhos/c	1	3/22/2022 3:11:07 PM	R86681
SM2540C MOD: TOTAL DISSOLVED SOLIDS				,	•		
	400	400	_			Analyst:	
Total Dissolved Solids	400	100	D	mg/L	1	3/24/2022 10:56:00 AM	
SM4500-H+B / 9040C: PH						Analyst:	MRA
рН	7.71		Н	pH units	1	3/22/2022 3:11:07 PM	R86681
EPA METHOD 8270C: SEMIVOLATILES						Analyst:	JME
Acenaphthene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Acenaphthylene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Aniline	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Anthracene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Azobenzene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Benz(a)anthracene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Benzo(a)pyrene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Benzo(b)fluoranthene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Benzo(g,h,i)perylene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Benzo(k)fluoranthene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Benzoic acid	ND	20		μg/L	1	4/1/2022 6:59:25 PM	66325
Benzyl alcohol	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Bis(2-chloroethoxy)methane	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Bis(2-chloroethyl)ether	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Bis(2-chloroisopropyl)ether	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Bis(2-ethylhexyl)phthalate	ND	10		μg/L	1	4/1/2022 6:59:25 PM	66325
4-Bromophenyl phenyl ether	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Butyl benzyl phthalate	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Carbazole	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
4-Chloro-3-methylphenol	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
4-Chloroaniline	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
2-Chloronaphthalene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
2-Chlorophenol	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
4-Chlorophenyl phenyl ether	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Chrysene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Di-n-butyl phthalate	ND	10		μg/L	1	4/1/2022 6:59:25 PM	66325
Di-n-octyl phthalate	ND	20		μg/L	1	4/1/2022 6:59:25 PM	66325
Dibenz(a,h)anthracene	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325
Dibenzofuran	ND	5.0		μg/L	1	4/1/2022 6:59:25 PM	66325

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 4:25:00 PMLab ID:2203A30-017Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	t: JME
1,2-Dichlorobenzene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
1,3-Dichlorobenzene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
1,4-Dichlorobenzene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
3,3´-Dichlorobenzidine	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Diethyl phthalate	ND	10	μg/L	1	4/1/2022 6:59:25 PM	66325
Dimethyl phthalate	ND	10	μg/L	1	4/1/2022 6:59:25 PM	66325
2,4-Dichlorophenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2,4-Dimethylphenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
4,6-Dinitro-2-methylphenol	ND	20	μg/L	1	4/1/2022 6:59:25 PM	66325
2,4-Dinitrophenol	ND	20	μg/L	1	4/1/2022 6:59:25 PM	66325
2,4-Dinitrotoluene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2,6-Dinitrotoluene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Fluoranthene	ND	10	μg/L	1	4/1/2022 6:59:25 PM	66325
Fluorene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Hexachlorobenzene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Hexachlorobutadiene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Hexachlorocyclopentadiene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Hexachloroethane	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Isophorone	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
1-Methylnaphthalene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2-Methylnaphthalene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2-Methylphenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
3+4-Methylphenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
N-Nitrosodi-n-propylamine	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
N-Nitrosodimethylamine	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
N-Nitrosodiphenylamine	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Naphthalene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2-Nitroaniline	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
3-Nitroaniline	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
4-Nitroaniline	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Nitrobenzene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2-Nitrophenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
4-Nitrophenol	ND	10	μg/L	1	4/1/2022 6:59:25 PM	66325
Pentachlorophenol	ND	20	μg/L	1	4/1/2022 6:59:25 PM	66325
Phenanthrene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Phenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Pyrene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Pyridine	ND	10	μg/L	1	4/1/2022 6:59:25 PM	66325

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 4:25:00 PMLab ID:2203A30-017Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES					Analys	st: JME
1,2,4-Trichlorobenzene	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2,4,5-Trichlorophenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
2,4,6-Trichlorophenol	ND	5.0	μg/L	1	4/1/2022 6:59:25 PM	66325
Surr: 2-Fluorophenol	59.3	29.4-87.7	%Rec	1	4/1/2022 6:59:25 PM	66325
Surr: Phenol-d5	43.4	28.5-64.7	%Rec	1	4/1/2022 6:59:25 PM	66325
Surr: 2,4,6-Tribromophenol	74.9	18.6-129	%Rec	1	4/1/2022 6:59:25 PM	66325
Surr: Nitrobenzene-d5	68.0	36.9-103	%Rec	1	4/1/2022 6:59:25 PM	66325
Surr: 2-Fluorobiphenyl	64.9	38.1-99.9	%Rec	1	4/1/2022 6:59:25 PM	66325
Surr: 4-Terphenyl-d14	99.6	48-155	%Rec	1	4/1/2022 6:59:25 PM	66325
EPA METHOD 8260B: VOLATILES					Analys	it: JR
Benzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Toluene	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
Ethylbenzene	ND	1.0	. •	1	3/28/2022 9:09:01 PM	R86782
Methyl tert-butyl ether (MTBE)	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
1,2,4-Trimethylbenzene	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
1,3,5-Trimethylbenzene	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
1,2-Dichloroethane (EDC)	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
1,2-Dibromoethane (EDB)	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
Naphthalene	ND	2.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1-Methylnaphthalene	ND	4.0		1	3/28/2022 9:09:01 PM	R86782
2-Methylnaphthalene	ND	4.0		1	3/28/2022 9:09:01 PM	R86782
Acetone	ND	10	μg/L	1	3/28/2022 9:09:01 PM	R86782
Bromobenzene	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
Bromodichloromethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Bromoform	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Bromomethane	ND	3.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
2-Butanone	ND	10	μg/L	1	3/28/2022 9:09:01 PM	R86782
Carbon disulfide	ND	10	μg/L	1	3/28/2022 9:09:01 PM	R86782
Carbon Tetrachloride	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Chlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Chloroethane	ND	2.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Chloroform	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
Chloromethane	ND	3.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
2-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
4-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
cis-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
cis-1,3-Dichloropropene	ND	1.0		1	3/28/2022 9:09:01 PM	R86782
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Dibromochloromethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order 2203A30

Hall Environmental Analysis Laboratory, Inc. Date Reported: 4/13/2022

CLIENT: CMB Environmental Client Sample ID: MW-7D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 4:25:00 PMLab ID:2203A30-017Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Dibromomethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,1-Dichloroethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,1-Dichloroethene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,2-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,3-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
2,2-Dichloropropane	ND	2.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,1-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Hexachlorobutadiene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
2-Hexanone	ND	10	μg/L	1	3/28/2022 9:09:01 PM	R86782
Isopropylbenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
4-Isopropyltoluene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
4-Methyl-2-pentanone	ND	10	μg/L	1	3/28/2022 9:09:01 PM	R86782
Methylene Chloride	ND	3.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
n-Butylbenzene	ND	3.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
n-Propylbenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
sec-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Styrene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
tert-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
trans-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Trichlorofluoromethane	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Vinyl chloride	ND	1.0	μg/L	1	3/28/2022 9:09:01 PM	R86782
Xylenes, Total	ND	1.5	μg/L	1	3/28/2022 9:09:01 PM	R86782
Surr: 1,2-Dichloroethane-d4	86.6	70-130	%Rec	1	3/28/2022 9:09:01 PM	R86782
Surr: 4-Bromofluorobenzene	96.5	70-130	%Rec	1	3/28/2022 9:09:01 PM	R86782
Surr: Dibromofluoromethane	96.0	70-130	%Rec	1	3/28/2022 9:09:01 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**Date Reported: **4/13/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: MW-7D

Project:Energy Resources Corp West LovingtonCollection Date: 3/16/2022 4:25:00 PMLab ID:2203A30-017Matrix: AQUEOUSReceived Date: 3/18/2022 10:10:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analy	st: JR
Surr: Toluene-d8	99.8	70-130	%Rec	1	3/28/2022 9:09:01 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: Trip Blank

Project: Energy Resources Corp West Lovington Collection Date:

Lab ID: 2203A30-018 **Matrix:** TRIP BLANK **Received Date:** 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Batch	
EPA METHOD 8260B: VOLATILES					Analys	t: JR
Benzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Toluene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Ethylbenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Naphthalene	ND	2.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1-Methylnaphthalene	ND	4.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
2-Methylnaphthalene	ND	4.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Acetone	ND	10	μg/L	1	3/28/2022 9:37:34 PM	R86782
Bromobenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Bromodichloromethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Bromoform	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Bromomethane	ND	3.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
2-Butanone	ND	10	μg/L	1	3/28/2022 9:37:34 PM	R86782
Carbon disulfide	ND	10	μg/L	1	3/28/2022 9:37:34 PM	R86782
Carbon Tetrachloride	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Chlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Chloroethane	ND	2.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Chloroform	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Chloromethane	ND	3.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
2-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
4-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
cis-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Dibromochloromethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Dibromomethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,1-Dichloroethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,1-Dichloroethene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,3-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
2,2-Dichloropropane	ND	2.0	μg/L	1	3/28/2022 9:37:34 PM	R86782

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2203A30

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: Trip Blank

Project: Energy Resources Corp West Lovington Collection Date:

Lab ID: 2203A30-018 **Matrix:** TRIP BLANK **Received Date:** 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analys	t: JR
1,1-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Hexachlorobutadiene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
2-Hexanone	ND	10	μg/L	1	3/28/2022 9:37:34 PM	R86782
Isopropylbenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
4-Isopropyltoluene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
4-Methyl-2-pentanone	ND	10	μg/L	1	3/28/2022 9:37:34 PM	R86782
Methylene Chloride	ND	3.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
n-Butylbenzene	ND	3.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
n-Propylbenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
sec-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Styrene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
tert-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
trans-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Trichlorofluoromethane	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Vinyl chloride	ND	1.0	μg/L	1	3/28/2022 9:37:34 PM	R86782
Xylenes, Total	ND	1.5	μg/L	1	3/28/2022 9:37:34 PM	R86782
Surr: 1,2-Dichloroethane-d4	92.3	70-130	%Rec	1	3/28/2022 9:37:34 PM	R86782
Surr: 4-Bromofluorobenzene	98.4	70-130	%Rec	1	3/28/2022 9:37:34 PM	R86782
Surr: Dibromofluoromethane	99.5	70-130	%Rec	1	3/28/2022 9:37:34 PM	R86782
Surr: Toluene-d8	98.8	70-130	%Rec	1	3/28/2022 9:37:34 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/13/2022

CLIENT: CMB Environmental Client Sample ID: Trip Blank 2

Project: Energy Resources Corp West Lovington Collection Date:

Lab ID: 2203A30-019 **Matrix:** TRIP BLANK **Received Date:** 3/18/2022 10:10:00 AM

Analyses	Result	RL (Qual Units	DF	Batch	
EPA METHOD 8260B: VOLATILES					Analyst	: JR
Benzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Toluene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Ethylbenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2-Dibromoethane (EDB)	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Naphthalene	ND	2.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1-Methylnaphthalene	ND	4.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
2-Methylnaphthalene	ND	4.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Acetone	ND	10	μg/L	1	3/28/2022 10:06:12 PM	R86782
Bromobenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Bromodichloromethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Bromoform	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Bromomethane	ND	3.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
2-Butanone	ND	10	μg/L	1	3/28/2022 10:06:12 PM	R86782
Carbon disulfide	ND	10	μg/L	1	3/28/2022 10:06:12 PM	R86782
Carbon Tetrachloride	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Chlorobenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Chloroethane	ND	2.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Chloroform	3.0	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Chloromethane	ND	3.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
2-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
4-Chlorotoluene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
cis-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Dibromochloromethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Dibromomethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,3-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,4-Dichlorobenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Dichlorodifluoromethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,1-Dichloroethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,1-Dichloroethene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,3-Dichloropropane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
2,2-Dichloropropane	ND	2.0	μg/L	1	3/28/2022 10:06:12 PM	R86782

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab Order **2203A30**

Date Reported: 4/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CMB Environmental Client Sample ID: Trip Blank 2

Project: Energy Resources Corp West Lovington Collection Date:

Lab ID: 2203A30-019 **Matrix:** TRIP BLANK **Received Date:** 3/18/2022 10:10:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	: JR
1,1-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Hexachlorobutadiene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
2-Hexanone	ND	10	μg/L	1	3/28/2022 10:06:12 PM	R86782
Isopropylbenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
4-Isopropyltoluene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
4-Methyl-2-pentanone	ND	10	μg/L	1	3/28/2022 10:06:12 PM	R86782
Methylene Chloride	ND	3.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
n-Butylbenzene	ND	3.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
n-Propylbenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
sec-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Styrene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
tert-Butylbenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,1,1,2-Tetrachloroethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,1,2,2-Tetrachloroethane	ND	2.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
trans-1,2-DCE	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,1,1-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,1,2-Trichloroethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Trichloroethene (TCE)	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Trichlorofluoromethane	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
1,2,3-Trichloropropane	ND	2.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Vinyl chloride	ND	1.0	μg/L	1	3/28/2022 10:06:12 PM	R86782
Xylenes, Total	ND	1.5	μg/L	1	3/28/2022 10:06:12 PM	R86782
Surr: 1,2-Dichloroethane-d4	83.8	70-130	%Rec	1	3/28/2022 10:06:12 PM	R86782
Surr: 4-Bromofluorobenzene	99.0	70-130	%Rec	1	3/28/2022 10:06:12 PM	R86782
Surr: Dibromofluoromethane	96.7	70-130	%Rec	1	3/28/2022 10:06:12 PM	R86782
Surr: Toluene-d8	102	70-130	%Rec	1	3/28/2022 10:06:12 PM	R86782

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

ND

0.010

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: MB SampType: MBLK TestCode: EPA Method 200.7: Metals Client ID: PBW Batch ID: A86739 RunNo: 86739 Prep Date: Analysis Date: 3/24/2022 SeqNo: 3062599 Units: mg/L Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Barium ND 0.0030 Chromium ND 0.0060 Nickel ND 0.010 Sodium ND 1.0

Sample ID: LLLCS	Samp	Type: LC:	SLL	Tes	tCode: EF	PA Method	200.7: Metals			
Client ID: BatchQC	Bato	h ID: A86	6739	F	RunNo: 86	6739				
Prep Date:	Analysis	Date: 3/2	24/2022	5	SeqNo: 30	062600	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0030	0.002000	0	86.2	50	150			
Chromium	ND	0.0060	0.006000	0	97.6	50	150			
Nickel	ND	0.010	0.005000	0	99.3	50	150			
Sodium	ND	1.0	0.5000	0	97.5	50	150			
Zinc	ND	0.010	0.01000	0	98.4	50	150			

Sample ID: LCS	Samp	Type: LC	S	Tes	tCode: EF	PA Method	200.7: Metals			
Client ID: LCSW	Bato	h ID: A8	6739	F	RunNo: 80	6739				
Prep Date:	Analysis	Date: 3/2	24/2022	9	SeqNo: 30	062601	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0030	0.5000	0	96.0	85	115			
Chromium	0.48	0.0060	0.5000	0	96.2	85	115			
Nickel	0.47	0.010	0.5000	0	93.3	85	115			
Sodium	51	1.0	50.00	0	102	85	115			
Zinc	0.48	0.010	0.5000	0	95.2	85	115			

Qualifiers:

Zinc

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: MB	SampType:	Type: MBLK TestCode: EPA 200.8: M							
Client ID: PBW	Batch ID:	A86914	F	RunNo: 869	914				
Prep Date:	Analysis Date:	4/1/2022	5	SeqNo: 3070726		Units: mg/L			
Analyte	Result Po	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND 0.00)10							
Arsenic	ND 0.00)10							
Beryllium	ND 0.00)10							
Cadmium	ND 0.000)50							
Selenium	ND 0.00)10							
Thallium	ND 0.000)25							
Sample ID: LLLCS-TL	SampType:	LCSLL	Tes	tCode: EP	A 200.8: M	letals			
Client ID: BatchQC	Batch ID:	A86914	F	RunNo: 869	914				
Prep Date:	Analysis Date:	4/1/2022	5	SeqNo: 307	70727	Units: mg/L			

Sample ID: LLLCS	Sam	SampType: LCSLL TestCode: EPA 200.8: Me								
Client ID: BatchQC	Bat	Batch ID: A86914 RunNo: 86914								
Prep Date:	Analysis	Analysis Date: 4/1/2022 SeqNo: 307072					Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010	0.001000	0	97.5	50	150			
Arsenic	ND	0.0010	0.001000	0	100	50	150			
Beryllium	ND	0.0010	0.001000	0	100	50	150			
Cadmium	0.00051	0.00050	0.0005000	0	101	50	150			
Selenium	0.0011	0.0010	0.001000	0	112	50	150			

%REC

100

LowLimit

HighLimit

150

SPK value SPK Ref Val

0.0002500

PQL

0.00025

Result

0.00025

Sample ID: LCS	Samp	SampType: LCS			tCode: EF	PA 200.8: M	letals					
Client ID: LCSW	Bat	Batch ID: A86914 RunNo: 869					914					
Prep Date:	Analysis	Date: 4/1	1/2022	SeqNo: 3070729			Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Antimony	0.024	0.0010	0.02500	0	96.0	85	115					
Arsenic	0.027	0.0010	0.02500	0	108	85	115					
Beryllium	0.025	0.0010	0.02500	0	98.8	85	115					
Cadmium	0.013	0.00050	0.01250	0	101	85	115					
Selenium	0.027	0.0010	0.02500	0	107	85	115					
Thallium	0.012	0.00025	0.01250	0	99.9	85	115					

Qualifiers:

Analyte

Thallium

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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%RPD

RPDLimit

Qual

Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: MB-66425 SampType: MBLK TestCode: EPA Method 245.1: Mercury

Client ID: PBW Batch ID: 66425 RunNo: 86790

Prep Date: 3/28/2022 Analysis Date: 3/28/2022 SeqNo: 3064662 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Mercury ND 0.00020

Sample ID: LCSLL-66425 SampType: LCSLL TestCode: EPA Method 245.1: Mercury

Client ID: BatchQC Batch ID: 66425 RunNo: 86790

Prep Date: 3/28/2022 Analysis Date: 3/28/2022 SeqNo: 3064663 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Mercury ND 0.00020 0.0001500 0 107 50 150

Sample ID: LCS-66425 SampType: LCS TestCode: EPA Method 245.1: Mercury

Client ID: LCSW Batch ID: 66425 RunNo: 86790

Prep Date: 3/28/2022 Analysis Date: 3/28/2022 SeqNo: 3064664 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Mercury 0.0049 0.00020 0.005000 0 98.0 85 115

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: MB SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBW Batch ID: R86662 RunNo: 86662

Prep Date: Analysis Date: 3/21/2022 SegNo: 3059554 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 0.50

Sample ID: LCS SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSW Batch ID: R86662 RunNo: 86662

Prep Date: Analysis Date: 3/21/2022 SegNo: 3059555 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 4.8 0.50 5.000 0 95.1 90 110

Sample ID: 2203A30-001AMS SampType: ms TestCode: EPA Method 300.0: Anions

Client ID: W. Windmill Water Batch ID: R86662 RunNo: 86662

Prep Date: Analysis Date: 3/21/2022 SeqNo: 3059557 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 71 5.0 50.00 23.62 95.3 86.3 114

Sample ID: 2203A30-001AMSD SampType: msd TestCode: EPA Method 300.0: Anions

Client ID: W. Windmill Water Batch ID: R86662 RunNo: 86662

Prep Date: Analysis Date: 3/21/2022 SeqNo: 3059558 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 71 5.0 50.00 23.62 95.1 86.3 114 0.107 20

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

ND

ND

1.0

1.0

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: 100ng Ics	SampT	SampType: LCS TestCode: EPA Method						TILES		
Client ID: LCSW	Batcl	n ID: R8 6	3690	F	RunNo: 86	690				
Prep Date:	Analysis D	Date: 3/2	e: 3/23/2022 SeqNo: 3061080			Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.2	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	22	1.0	20.00	0	110	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.0	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	79.2	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.2	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.8	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID: mb	SampT	ype: MB	LK	Tes	tCode: EF	A Method	8260B: VOLA	TILES		
Client ID: PBW	Batch	ID: R8 6	6690	F	RunNo: 86	6690				
Prep Date:	Analysis D	ate: 3/2	23/2022	5	SeqNo: 30	61105	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

10140110		1.0
Ethylbenzene	ND	1.0
Methyl tert-butyl ether (MTBE)	ND	1.0
1,2,4-Trimethylbenzene	ND	1.0
1,3,5-Trimethylbenzene	ND	1.0
1,2-Dichloroethane (EDC)	ND	1.0
1,2-Dibromoethane (EDB)	ND	1.0
Naphthalene	ND	2.0
1-Methylnaphthalene	ND	4.0
2-Methylnaphthalene	ND	4.0
Acetone	ND	10
Bromobenzene	ND	1.0
Bromodichloromethane	ND	1.0
Bromoform	ND	1.0
Bromomethane	ND	3.0
2-Butanone	ND	10
Carbon disulfide	ND	10
Carbon Tetrachloride	ND	1.0
Chlorobenzene	ND	1.0
Chloroethane	ND	2.0
Chloroform	ND	1.0
Chloromethane	ND	3.0
2-Chlorotoluene	ND	1.0

Qualifiers:

Benzene

Toluene

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: mb	Samp	уре: ме	BLK	Tes	tCode: EF	PA Method	8260B: VOLA	TILES		
Client ID: PBW	Batcl	n ID: R8	6690	F	RunNo: 86	6690				
Prep Date:	Analysis [Date: 3/2	23/2022	5	SeqNo: 30	061105	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
.,_, 1101110100000000	ND	2.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: mb	SampT	уре: МЕ	BLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batcl	n ID: R8	6690	F	RunNo: 80	6690				
Prep Date:	Analysis D	Date: 3/2	23/2022	;	SeqNo: 30	061105	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.1	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.9	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: mb	Samp1	Гуре: МЕ	BLK	LK TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batcl	h ID: R8	6782	F	RunNo: 80	6782					
Prep Date:	Analysis [Date: 3/2	28/2022	9	SeqNo: 3	065298	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	3.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	3.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: mb	Samp1	уре: МЕ	BLK	Tes	stCode: EF	PA Method	8260B: VOLA	TILES		
Client ID: PBW	Batcl	n ID: R8	6782	F	RunNo: 86	5782				
Prep Date:	Analysis D	Date: 3/	28/2022	;	SeqNo: 30	065298	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
,2-Dichlorobenzene	ND	1.0								
,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
sopropylbenzene	ND	1.0								
l-Isopropyltoluene	ND	1.0								
-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
ert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Γetrachloroethene (PCE)	ND	1.0								
rans-1,2-DCE	ND	1.0								
rans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Frichloroethene (TCE)	ND	1.0								
richlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
/inyl chloride	ND	1.0								
Kylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.4		10.00		84.5	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

SampType: LCS4

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Sample ID: 100ng lcs4

Project: Energy Resources Corp West Lovington

Sample ID: mb	SampT	уре: МЕ	BLK	Tes	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch	n ID: R8	6782	F	RunNo: 86	5782					
Prep Date:	Analysis D	Analysis Date: 3/28/2022			SeqNo: 30	065298	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130				
Surr: Dibromofluoromethane	9.4		10.00		93.5	70	130				
Surr: Toluene-d8	10		10.00		101	70	130				

TestCode: EPA Method 8260B: VOLATILES

	- Cap.) -		. 00		Juiou				
Client ID: BatchQC	Batch	n ID: R8	6782	F	RunNo: 86	5782				
Prep Date:	Analysis D	Date: 3/2	28/2022	S	SeqNo: 30)65317	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	88.4	70	130			
Toluene	20	1.0	20.00	0	99.1	70	130			
Ethylbenzene	20	1.0	20.00	0	100	70	130			
Methyl tert-butyl ether (MTBE)	37	1.0	40.00	0	92.3	70	130			
1,2,4-Trimethylbenzene	20	1.0	20.00	0	102	70	130			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.7	70	130			
1,2-Dichloroethane (EDC)	18	1.0	20.00	0	90.3	70	130			
1,2-Dibromoethane (EDB)	20	1.0	20.00	0	97.9	70	130			
Naphthalene	19	2.0	20.00	0	96.3	70	130			
1-Methylnaphthalene	20	4.0	20.00	0	100	60.3	126			
2-Methylnaphthalene	20	4.0	20.00	0	98.7	59	127			
Acetone	30	10	40.00	0	74.8	53.2	126			
Bromobenzene	19	1.0	20.00	0	93.4	70	130			
Bromodichloromethane	19	1.0	20.00	0	96.8	70	130			
Bromoform	18	1.0	20.00	0	88.7	70	130			
Bromomethane	15	3.0	20.00	0	74.0	15	213			
2-Butanone	32	10	40.00	0	80.8	59.4	136			
Carbon disulfide	36	10	40.00	0	89.5	70	130			
Carbon Tetrachloride	18	1.0	20.00	0	90.5	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
Chloroethane	19	2.0	20.00	0	92.7	69.5	131			
Chloroform	17	1.0	20.00	0	86.7	70	130			
Chloromethane	21	3.0	20.00	0	106	56.9	143			
2-Chlorotoluene	20	1.0	20.00	0	97.8	70	130			
4-Chlorotoluene	18	1.0	20.00	0	92.4	70	130			
cis-1,2-DCE	18	1.0	20.00	0	90.9	70	130			
cis-1,3-Dichloropropene	20	1.0	20.00	0	100	70	130			
1,2-Dibromo-3-chloropropane	17	2.0	20.00	0	84.4	62.3	135			
Dibromochloromethane	19	1.0	20.00	0	92.6	70	130			
Dibromomethane	20	1.0	20.00	0	102	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: 100ng lcs4	Samp	Гуре: LC	S4	TestCode: EPA Method 8260B: VOLATILES								
Client ID: BatchQC	Batc	h ID: R8	6782	F	RunNo: 8	6782						
Prep Date:	Analysis [Date: 3/ 2	28/2022	S	SeqNo: 3	065317	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
,2-Dichlorobenzene	19	1.0	20.00	0	93.3	70	130					
,3-Dichlorobenzene	19	1.0	20.00	0	93.8	70	130					
,4-Dichlorobenzene	19	1.0	20.00	0	94.3	70	130					
Dichlorodifluoromethane	22	1.0	20.00	0	110	41	159					
,1-Dichloroethane	17	1.0	20.00	0	87.4	70	130					
,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130					
,2-Dichloropropane	17	1.0	20.00	0	85.7	70	130					
,3-Dichloropropane	20	1.0	20.00	0	98.2	70	130					
2,2-Dichloropropane	19	2.0	20.00	0	94.5	70	130					
,1-Dichloropropene	18	1.0	20.00	0	90.7	70	130					
Hexachlorobutadiene	19	1.0	20.00	0	96.8	63.6	129					
?-Hexanone	36	10	40.00	0	90.1	63.2	130					
sopropylbenzene	21	1.0	20.00	0	107	70	130					
-Isopropyltoluene	19	1.0	20.00	0	97.0	70	130					
-Methyl-2-pentanone	38	10	40.00	0	95.2	64.7	132					
lethylene Chloride	18	3.0	20.00	0	88.5	70	130					
-Butylbenzene	20	3.0	20.00	0	98.6	70	130					
-Propylbenzene	20	1.0	20.00	0	97.9	70	130					
ec-Butylbenzene	20	1.0	20.00	0	99.8	70	130					
Styrene	19	1.0	20.00	0	97.4	70	130					
ert-Butylbenzene	20	1.0	20.00	0	99.8	70	130					
,1,1,2-Tetrachloroethane	21	1.0	20.00	0	104	70	130					
,1,2,2-Tetrachloroethane	19	2.0	20.00	0	93.3	65.8	138					
Tetrachloroethene (PCE)	21	1.0	20.00	0	103	70	130					
rans-1,2-DCE	18	1.0	20.00	0	89.4	70	130					
rans-1,3-Dichloropropene	21	1.0	20.00	0	105	70	130					
,2,3-Trichlorobenzene	19	1.0	20.00	0	95.7	70	130					
,2,4-Trichlorobenzene	20	1.0	20.00	0	100	70	130					
,1,1-Trichloroethane	17	1.0	20.00	0	86.1	70	130					
,1,2-Trichloroethane	20	1.0	20.00	0	99.5	70	130					
richloroethene (TCE)	17	1.0	20.00	0	83.0	70	130					
richlorofluoromethane	19	1.0	20.00	0	95.5	70	130					
,2,3-Trichloropropane	19	2.0	20.00	0	97.3	70	130					
'inyl chloride	21	1.0	20.00	0	103	70	130					
(ylenes, Total	60	1.5	60.00	0	99.3	70	130					
Surr: 1,2-Dichloroethane-d4	8.8	1.0	10.00	v	87.6	70	130					
Surr: 4-Bromofluorobenzene	9.2		10.00		91.9	70	130					
Surr: Dibromofluoromethane	9.0		10.00		89.7	70	130					
Surr: Toluene-d8	9.7		10.00		96.6	70	130					

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: mb-66307	SampT	уре: МЕ	LK	Tes	tCode: EF	PA Method	8270C: Semiv	olatiles		
Client ID: PBW	Batch	n ID: 663	807	F	RunNo: 80	6737				
Prep Date: 3/22/2022	Analysis D	Date: 3/2	24/2022	5	SeqNo: 30	062572	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	5.0								
Acenaphthylene	ND	5.0								
Aniline	ND	5.0								
Anthracene	ND	5.0								
Azobenzene	ND	5.0								
Benz(a)anthracene	ND	5.0								
Benzo(a)pyrene	ND	5.0								
Benzo(b)fluoranthene	ND	5.0								
Benzo(g,h,i)perylene	ND	5.0								
Benzo(k)fluoranthene	ND	5.0								
Benzoic acid	ND	20								
Benzyl alcohol	ND	5.0								
Bis(2-chloroethoxy)methane	ND	5.0								
Bis(2-chloroethyl)ether	ND	5.0								
Bis(2-chloroisopropyl)ether	ND	5.0								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	5.0								
Butyl benzyl phthalate	ND	5.0								
Carbazole	ND	5.0								
4-Chloro-3-methylphenol	ND	5.0								
4-Chloroaniline	ND	5.0								
2-Chloronaphthalene	ND	5.0								
2-Chlorophenol	ND	5.0								
4-Chlorophenyl phenyl ether	ND	5.0								
Chrysene	ND	5.0								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	5.0								
Dibenzofuran	ND	5.0								
1,2-Dichlorobenzene	ND	5.0								
1,3-Dichlorobenzene	ND	5.0								
1,4-Dichlorobenzene	ND	5.0								
3,3'-Dichlorobenzidine	ND	5.0								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	5.0								
2,4-Dimethylphenol	ND	5.0								
4,6-Dinitro-2-methylphenol	ND	5.0								
2,4-Dinitrophenol	ND	5.0								

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: mb-66307	SampTy	pe: MBLK		Tes	tCode: EF	PA Method	8270C: Semiv	olatiles		
Client ID: PBW	Batch I	D: 66307		F	RunNo: 86	6737				
Prep Date: 3/22/2022		te: 3/24/2022	2	5	SeqNo: 30	062572	Units: µg/L			
Analyte	Result	PQL SPK	value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	5.0								
2,6-Dinitrotoluene	ND	5.0								
Fluoranthene	ND	10								
Fluorene	ND	5.0								
Hexachlorobenzene	ND	5.0								
Hexachlorobutadiene	ND	5.0								
Hexachlorocyclopentadiene	ND	5.0								
Hexachloroethane	ND	5.0								
Indeno(1,2,3-cd)pyrene	ND	5.0								
Isophorone	ND	5.0								
1-Methylnaphthalene	ND	5.0								
2-Methylnaphthalene	ND	5.0								
2-Methylphenol	ND	5.0								
3+4-Methylphenol	ND	5.0								
N-Nitrosodi-n-propylamine	ND	5.0								
N-Nitrosodimethylamine	ND	5.0								
N-Nitrosodiphenylamine	ND	5.0								
Naphthalene	ND	5.0								
2-Nitroaniline	ND	5.0								
3-Nitroaniline	ND	5.0								
4-Nitroaniline	ND	5.0								
Nitrobenzene	ND	5.0								
2-Nitrophenol	ND	5.0								
4-Nitrophenol	ND	5.0								
Pentachlorophenol	ND	20								
Phenanthrene	ND	5.0								
Phenol	ND	5.0								
Pyrene	ND	5.0								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	5.0								
2,4,5-Trichlorophenol	ND	5.0								
2,4,6-Trichlorophenol	ND	5.0								
Surr: 2-Fluorophenol	110	2	0.00		56.7	29.4	87.7			
Surr: Phenol-d5	86	2	0.00		43.0	28.5	64.7			
Surr: 2,4,6-Tribromophenol	160	2	0.00		79.5	18.6	129			
Surr: Nitrobenzene-d5	64		0.00		64.3	36.9	103			
Surr: 2-Fluorobiphenyl	65		0.00		65.2	38.1	99.9			
Surr: 4-Terphenyl-d14	97		0.00		96.7	48	155			
. ,										

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Ics-66307	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8270C: Semiv	olatiles		
Client ID: LCSW	Batch	n ID: 663	307	F	RunNo: 86	6737				
Prep Date: 3/22/2022	Analysis D	Date: 3/2	24/2022	9	SeqNo: 30	062573	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	75	5.0	100.0	0	75.5	28	101			
4-Chloro-3-methylphenol	150	5.0	200.0	0	75.8	28.3	103			
2-Chlorophenol	140	5.0	200.0	0	69.5	29.3	105			
1,4-Dichlorobenzene	60	5.0	100.0	0	60.1	15	87.6			
2,4-Dinitrotoluene	60	5.0	100.0	0	59.5	23.6	90.9			
N-Nitrosodi-n-propylamine	75	5.0	100.0	0	74.5	23.1	94.6			
4-Nitrophenol	92	5.0	200.0	0	46.1	15	77			
Pentachlorophenol	140	20	200.0	0	70.1	21	111			
Phenol	82	5.0	200.0	0	40.9	16.8	70.5			
Pyrene	91	5.0	100.0	0	90.7	30.5	129			
1,2,4-Trichlorobenzene	63	5.0	100.0	0	62.8	15	88.2			
Surr: 2-Fluorophenol	110		200.0		53.8	29.4	87.7			
Surr: Phenol-d5	81		200.0		40.5	28.5	64.7			
Surr: 2,4,6-Tribromophenol	170		200.0		85.8	18.6	129			
Surr: Nitrobenzene-d5	66		100.0		65.9	36.9	103			
Surr: 2-Fluorobiphenyl	67		100.0		66.7	38.1	99.9			
Surr: 4-Terphenyl-d14	99		100.0		99.0	48	155			

Sample ID: Icsd-66307	SampType: LCSD TestCode: EPA Method 8270C: Semivolatiles									
Client ID: LCSS02	Batch	h ID: 663	307	F	RunNo: 86	5737				
Prep Date: 3/22/2022	Analysis Date: 3/24/2022			5	SeqNo: 30)62574	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	59	5.0	100.0	0	59.3	28	101	24.0	41.2	
4-Chloro-3-methylphenol	120	5.0	200.0	0	60.5	28.3	103	22.4	44.7	
2-Chlorophenol	110	5.0	200.0	0	57.5	29.3	105	19.0	35.6	
1,4-Dichlorobenzene	51	5.0	100.0	0	51.3	15	87.6	15.7	30.4	
2,4-Dinitrotoluene	54	5.0	100.0	0	53.8	23.6	90.9	10.1	53.1	
N-Nitrosodi-n-propylamine	61	5.0	100.0	0	60.6	23.1	94.6	20.6	31.1	
4-Nitrophenol	90	5.0	200.0	0	45.2	15	77	1.93	52.4	
Pentachlorophenol	140	20	200.0	0	70.5	21	111	0.603	71.6	
Phenol	67	5.0	200.0	0	33.4	16.8	70.5	20.2	37.2	
Pyrene	93	5.0	100.0	0	92.9	30.5	129	2.44	51.3	
1,2,4-Trichlorobenzene	50	5.0	100.0	0	50.0	15	88.2	22.7	31.8	
Surr: 2-Fluorophenol	88		200.0		44.1	29.4	87.7	0	0	
Surr: Phenol-d5	69		200.0		34.5	28.5	64.7	0	0	
Surr: 2,4,6-Tribromophenol	140		200.0		71.4	18.6	129	0	0	
Surr: Nitrobenzene-d5	54		100.0		54.5	36.9	103	0	0	
Surr: 2-Fluorobiphenyl	54		100.0		53.9	38.1	99.9	0	0	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Icsd-66307 SampType: LCSD TestCode: EPA Method 8270C: Semivolatiles

Client ID: LCSS02 Batch ID: 66307 RunNo: 86737

Prep Date: 3/22/2022 Analysis Date: 3/24/2022 SeqNo: 3062574 Units: μg/L

Analyte Result SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit Surr: 4-Terphenyl-d14 100 100.0 102 48 155 0 0

Sample ID: mb-66325	SampT	ype: MBLK	Tes	stCode: EPA Metho	1 8270C: Semi	olatiles		
Client ID: PBW	Batch	n ID: 66325	I	RunNo: 86930				
Prep Date: 3/22/2022	Analysis D	Date: 4/1/2022		SeqNo: 3071396	Units: µg/L			
Analyte	Result	PQL SPK val	ue SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	5.0						
Acenaphthylene	ND	5.0						
Aniline	ND	5.0						
Anthracene	ND	5.0						
Azobenzene	ND	5.0						
Benz(a)anthracene	ND	5.0						
Benzo(a)pyrene	ND	5.0						
Benzo(b)fluoranthene	ND	5.0						
Benzo(g,h,i)perylene	ND	5.0						
Benzo(k)fluoranthene	ND	5.0						
Benzoic acid	ND	20						
Benzyl alcohol	ND	5.0						
Bis(2-chloroethoxy)methane	ND	5.0						
Bis(2-chloroethyl)ether	ND	5.0						
Bis(2-chloroisopropyl)ether	ND	5.0						
Bis(2-ethylhexyl)phthalate	ND	10						
4-Bromophenyl phenyl ether	ND	5.0						
Butyl benzyl phthalate	ND	5.0						
Carbazole	ND	5.0						
4-Chloro-3-methylphenol	ND	5.0						
4-Chloroaniline	ND	5.0						
2-Chloronaphthalene	ND	5.0						
2-Chlorophenol	ND	5.0						
4-Chlorophenyl phenyl ether	ND	5.0						
Chrysene	ND	5.0						
Di-n-butyl phthalate	ND	10						
Di-n-octyl phthalate	ND	20						
Dibenz(a,h)anthracene	ND	5.0						
Dibenzofuran	ND	5.0						
1,2-Dichlorobenzene	ND	5.0						
1,3-Dichlorobenzene	ND	5.0						
1,4-Dichlorobenzene	ND	5.0						
1, 1 2 3 110 100 01 120 110	.,,,	0.0						

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: mb-66325	SampT	ype: MBLK	TestCode: EPA Method 8270C: Semivolatiles
Client ID: PBW	Batch	n ID: 66325	RunNo: 86930
Prep Date: 3/22/2022		Date: 4/1/2022	SeqNo: 3071396 Units: μ g/L
Analyte	Result	PQL SPK value	ie SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
3,3'-Dichlorobenzidine	ND	5.0	
Diethyl phthalate	ND	10	
Dimethyl phthalate	ND	10	
2,4-Dichlorophenol	ND	5.0	
2,4-Dimethylphenol	ND	5.0	
4,6-Dinitro-2-methylphenol	ND	20	
2,4-Dinitrophenol	ND	20	
2,4-Dinitrotoluene	ND	5.0	
2,6-Dinitrotoluene	ND	5.0	
Fluoranthene	ND	10	
Fluorene	ND	5.0	
Hexachlorobenzene	ND	5.0	
Hexachlorobutadiene	ND	5.0	
Hexachlorocyclopentadiene	ND	5.0	
Hexachloroethane	ND	5.0	
Indeno(1,2,3-cd)pyrene	ND	5.0	
Isophorone	ND	5.0	
1-Methylnaphthalene	ND	5.0	
2-Methylnaphthalene	ND	5.0	
2-Methylphenol	ND	5.0	
3+4-Methylphenol	ND	5.0	
N-Nitrosodi-n-propylamine	ND	5.0	
N-Nitrosodimethylamine	ND	5.0	
N-Nitrosodiphenylamine	ND	5.0	
Naphthalene	ND	5.0	
2-Nitroaniline	ND	5.0	
3-Nitroaniline	ND	5.0	
4-Nitroaniline	ND	5.0	
Nitrobenzene	ND	5.0	
2-Nitrophenol	ND	5.0	
4-Nitrophenol	ND	10	
Pentachlorophenol	ND	20	
Phenanthrene	ND	5.0	
Phenol	ND	5.0	
Pyrene	ND	5.0	
Pyridine	ND	10	
1,2,4-Trichlorobenzene	ND	5.0	
2,4,5-Trichlorophenol	ND	5.0	
2,4,6-Trichlorophenol	ND	5.0	
2, 1,0 Thornorophonor	ND	0.0	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: mb-66325	SampT	уре: МВ	BLK	Tes	TestCode: EPA Method 8270C: Semivolatiles						
Client ID: PBW	Batch ID: 66325			F	RunNo: 86	6930					
Prep Date: 3/22/2022	Analysis Date: 4/1/2022			SeqNo: 3071396			Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 2-Fluorophenol	120		200.0		61.7	29.4	87.7				
Surr: Phenol-d5	95		200.0		47.4	28.5	64.7				
Surr: 2,4,6-Tribromophenol	120		200.0		61.6	18.6	129				
Surr: Nitrobenzene-d5	65		100.0		64.8	36.9	103				
Surr: 2-Fluorobiphenyl	60		100.0		60.1	38.1	99.9				
Surr: 4-Terphenyl-d14	98		100.0		97.6	48	155				

Sample ID: Ics-66325	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8270C: Semiv	olatiles/		
Client ID: LCSW	Batcl	n ID: 663	325	F	RunNo: 86	6930				
Prep Date: 3/22/2022	Analysis D	Date: 4/ 1	1/2022	5	SeqNo: 30	071397	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	48	5.0	100.0	0	47.5	28	101			
4-Chloro-3-methylphenol	62	5.0	100.0	0	62.1	28.3	103			
2-Chlorophenol	56	5.0	100.0	0	56.4	29.3	105			
1,4-Dichlorobenzene	22	5.0	100.0	0	22.0	15	87.6			
2,4-Dinitrotoluene	69	5.0	100.0	0	68.9	23.6	90.9			
N-Nitrosodi-n-propylamine	62	5.0	100.0	0	62.2	23.1	94.6			
4-Nitrophenol	47	10	100.0	0	46.9	15	77			
Pentachlorophenol	55	20	100.0	0	54.8	21	111			
Phenol	38	5.0	100.0	0	37.6	16.8	70.5			
Pyrene	88	5.0	100.0	0	87.9	30.5	129			
1,2,4-Trichlorobenzene	20	5.0	100.0	0	20.2	15	88.2			
Surr: 2-Fluorophenol	150		300.0		49.4	29.4	87.7			
Surr: Phenol-d5	120		300.0		40.1	28.5	64.7			
Surr: 2,4,6-Tribromophenol	230		300.0		75.8	18.6	129			
Surr: Nitrobenzene-d5	110		200.0		56.8	36.9	103			
Surr: 2-Fluorobiphenyl	89		200.0		44.4	38.1	99.9			
Surr: 4-Terphenyl-d14	170		200.0		86.3	48	155			

Sample ID: Icsr-66325	SampT	ype: LC	SD	TestCode: EPA Method 8270C: Semivolatiles						
Client ID: LCSS02	Batch	n ID: 663	325	F						
Prep Date:	Analysis D	Date: 4/	1/2022	5	SeqNo: 30	071398	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	47	5.0	100.0	0	47.3	28	101	0.519	41.2	
4-Chloro-3-methylphenol	63	5.0	100.0	0	62.5	28.3	103	0.721	44.7	
2-Chlorophenol	57	5.0	100.0	0	56.9	29.3	105	0.771	35.6	
1,4-Dichlorobenzene	23	5.0	100.0	0	23.4	15	87.6	6.30	30.4	
2,4-Dinitrotoluene	70	5.0	100.0	0	69.7	23.6	90.9	1.29	53.1	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Icsr-66325	Samp	Гуре: LC :	SD	Tes	TestCode: EPA Method 8270C: Semivolatiles						
Client ID: LCSS02	Batcl	h ID: 663	325	F	RunNo: 80						
Prep Date:	Analysis Date: 4/1/2022			3	SeqNo: 30	71398	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
N-Nitrosodi-n-propylamine	64	5.0	100.0	0	63.7	23.1	94.6	2.52	31.1		
4-Nitrophenol	47	10	100.0	0	47.5	15	77	1.13	52.4		
Pentachlorophenol	55	20	100.0	0	54.7	21	111	0.187	71.6		
Phenol	36	5.0	100.0	0	36.0	16.8	70.5	4.33	37.2		
Pyrene	90	5.0	100.0	0	89.5	30.5	129	1.84	51.3		
1,2,4-Trichlorobenzene	20	5.0	100.0	0	20.4	15	88.2	0.904	31.8		
Surr: 2-Fluorophenol	150		300.0		50.6	29.4	87.7	0	0		
Surr: Phenol-d5	120		300.0		39.6	28.5	64.7	0	0		
Surr: 2,4,6-Tribromophenol	230		300.0		77.0	18.6	129	0	0		
Surr: Nitrobenzene-d5	120		200.0		58.1	36.9	103	0	0		
Surr: 2-Fluorobiphenyl	85		200.0		42.3	38.1	99.9	0	0		
Surr: 4-Terphenyl-d14	170		200.0		83.2	48	155	0	0		

Sample ID: Ics-66355	SampT	SampType: LCS TestCode: EPA Meth					d 8270C: Semivolatiles					
Client ID: LCSW	Batch	ID: 663	355	F	RunNo: 86	6930						
Prep Date: 3/23/2022	Analysis D	ate: 4/	1/2022	5	SeqNo: 30	71399	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: 2-Fluorophenol	110		200.0		52.9	29.4	87.7					
Surr: Phenol-d5	82		200.0		41.1	28.5	64.7					
Surr: 2,4,6-Tribromophenol	110		200.0		57.4	18.6	129					
Surr: Nitrobenzene-d5	65		100.0		65.2	36.9	103					
Surr: 2-Fluorobiphenyl	61		100.0		60.7	38.1	99.9					
Surr: 4-Terphenyl-d14	88		100.0		88.5	48	155					

Sample ID: Icsd-66355	SampT	ype: LC	SD	TestCode: EPA Method 8270C: Semivolatiles						
Client ID: LCSS02	Batch	n ID: 663	355	F	RunNo: 86930					
Prep Date: 3/23/2022	Analysis D	Analysis Date: 4/1/2022			SeqNo: 3071400			;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	81		200.0		40.3	29.4	87.7	0	0	
Surr: Phenol-d5	67		200.0		33.7	28.5	64.7	0	0	
Surr: 2,4,6-Tribromophenol	120		200.0		59.1	18.6	129	0	0	
Surr: Nitrobenzene-d5	55		100.0		55.4	36.9	103	0	0	
Surr: 2-Fluorobiphenyl	50		100.0		50.0	38.1	99.9	0	0	
Surr: 4-Terphenyl-d14	90		100.0		89.7	48	155	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30** *13-Apr-22*

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Ics-66325	Samp	Гуре: LC :	S4	Tes	tCode: EF	PA Method	8270C: Semiv	olatiles				
Client ID: BatchQC	Batcl	h ID: 663	25	R	RunNo: 86930							
Prep Date: 3/22/2022	Analysis [Date: 4/ 1	/2022	S	SeqNo: 30	071466	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Acenaphthene	48	5.0	100.0	0	47.5	35.1	135					
Acenaphthylene	49	5.0	100.0	0	49.0	36.1	131					
Aniline	55	5.0	100.0	0	54.7	15	128					
Anthracene	79	5.0	100.0	0	79.2	59.2	129					
Azobenzene	70	5.0	100.0	0	69.5	54.7	134					
Benz(a)anthracene	90	5.0	100.0	0	89.6	60.3	130					
Benzo(a)pyrene	87	5.0	100.0	0	86.9	60.6	145					
Benzo(b)fluoranthene	88	5.0	100.0	0	87.6	59.3	146					
Benzo(g,h,i)perylene	86	5.0	100.0	0	86.2	57.6	146					
Benzo(k)fluoranthene	86	5.0	100.0	0	86.3	55	151					
Benzoic acid	45	20	100.0	0	44.6	21.8	98.2					
Benzyl alcohol	63	5.0	100.0	0	63.0	22.7	145					
Bis(2-chloroethoxy)methane	57	5.0	100.0	0	56.9	25.2	134					
Bis(2-chloroethyl)ether	61	5.0	100.0	0	61.1	19.8	141					
Bis(2-chloroisopropyl)ether	56	5.0	100.0	0	56.1	16.1	137					
Bis(2-ethylhexyl)phthalate	90	10	100.0	0	90.2	69	132					
-Bromophenyl phenyl ether	71	5.0	100.0	0	71.0	52.1	138					
Butyl benzyl phthalate	90	5.0	100.0	0	90.0	70.1	128					
Carbazole	75	5.0	100.0	0	75.4	63.9	128					
-Chloro-3-methylphenol	62	5.0	100.0	0	62.1	53.9	129					
-Chloroaniline	59	5.0	100.0	0	59.0	19.4	143					
2-Chloronaphthalene	38	5.0	100.0	0	38.1	25.6	133					
2-Chlorophenol	56	5.0	100.0	0	56.4	16.1	144					
-Chlorophenyl phenyl ether	61	5.0	100.0	0	60.6	49	131					
Chrysene	90	5.0	100.0	0	89.6	60.9	135					
Di-n-butyl phthalate	83	10	100.0	0	82.9	63.2	136					
Di-n-octyl phthalate	92	20	100.0	0	91.6	67.9	132					
Dibenz(a,h)anthracene	84	5.0	100.0	0	84.1	59.5	145					
Dibenzofuran	58	5.0	100.0	0	58.0	40.2	136					
1,2-Dichlorobenzene	23	5.0	100.0	0	23.3	15	106					
,3-Dichlorobenzene	21	5.0	100.0	0	21.4	15	100					
1,4-Dichlorobenzene	22	5.0	100.0	0	22.0	15	99.1					
3,3'-Dichlorobenzidine	ND	5.0	100.0	0	4.28	72.3	127			S		
Diethyl phthalate	77	10	100.0	0	77.3	55.9	140					
Dimethyl phthalate	68	10	100.0	0	67.8	57.1	133					
2,4-Dichlorophenol	59	5.0	100.0	0	58.7	24.2	138					
2,4-Dimethylphenol	47	5.0	100.0	0	47.1	23.3	135					
4,6-Dinitro-2-methylphenol	77	20	100.0	0	77.1	45.4	138					
2,4-Dinitrophenol	59	20	100.0	0	59.2	44.4	126					

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Ics-66325	SampT	ype: LC :	S4	Tes	tCode: EF	PA Method	8270C: Semiv	olatiles		
Client ID: BatchQC	Batch	ID: 663	325	F	RunNo: 80	6930				
Prep Date: 3/22/2022	Analysis D	ate: 4/ 1	1/2022	5	SeqNo: 30	071466	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	69	5.0	100.0	0	68.9	63.8	136			
2,6-Dinitrotoluene	59	5.0	100.0	0	59.1	55.8	135			
Fluoranthene	83	10	100.0	0	83.3	63.9	137			
Fluorene	62	5.0	100.0	0	61.9	51.8	131			
Hexachlorobenzene	68	5.0	100.0	0	68.0	43.7	146			
Hexachlorobutadiene	13	5.0	100.0	0	12.9	15	109			S
Hexachlorocyclopentadiene	21	5.0	100.0	0	20.8	15	112			
Hexachloroethane	16	5.0	100.0	0	16.0	15	89.4			
Indeno(1,2,3-cd)pyrene	83	5.0	100.0	0	83.1	61.6	140			
Isophorone	62	5.0	100.0	0	61.5	24.8	121			
1-Methylnaphthalene	31	5.0	100.0	0	31.0	32.9	124			S
2-Methylnaphthalene	30	5.0	100.0	0	29.6	20.4	129			
2-Methylphenol	57	5.0	100.0	0	56.6	18.7	143			
3+4-Methylphenol	58	5.0	100.0	0	57.8	19.4	138			
N-Nitrosodi-n-propylamine	62	5.0	100.0	0	62.2	22.3	137			
N-Nitrosodimethylamine	58	5.0	100.0	0	58.0	15	124			
N-Nitrosodiphenylamine	65	5.0	100.0	0	64.5	54.5	131			
Naphthalene	31	5.0	100.0	0	31.0	15	124			
2-Nitroaniline	64	5.0	100.0	0	64.3	55.1	134			
3-Nitroaniline	69	5.0	100.0	0	68.5	15	229			
4-Nitroaniline	75	5.0	100.0	0	74.8	63.3	136			
Nitrobenzene	60	5.0	100.0	0	59.5	21.8	134			
2-Nitrophenol	54	5.0	100.0	0	54.1	21.4	140			
4-Nitrophenol	47	10	100.0	0	46.9	39.7	84.3			
Pentachlorophenol	55	20	100.0	0	54.8	52.6	146			
Phenanthrene	80	5.0	100.0	0	79.9	63.1	130			
Phenol	38	5.0	100.0	0	37.6	15	88.4			
Pyrene	88	5.0	100.0	0	87.9	59.5	135			
Pyridine	36	10	100.0	0	36.0	15	116			
1,2,4-Trichlorobenzene	20	5.0	100.0	0	20.2	15	115			
2,4,5-Trichlorophenol	53	5.0	100.0	0	53.4	47.2	132			
2,4,6-Trichlorophenol	53	5.0	100.0	0	52.5	41.7	134			
Surr: 2-Fluorophenol	150		300.0		49.4	29.4	87.7			
Surr: Phenol-d5	120		300.0		40.1	28.5	64.7			
Surr: 2,4,6-Tribromophenol	230		300.0		75.8	18.6	129			
Surr: Nitrobenzene-d5	110		200.0		56.8	36.9	103			
Surr: 2-Fluorobiphenyl	89		200.0		44.4	38.1	99.9			
Surr: 4-Terphenyl-d14	170		200.0		86.3	48	155			
, , ,	-		-			-				

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Icsr-66325	Samp	ype: LC	SD4	Tes	TestCode: EPA Method 8270C: Semivolatiles							
Client ID: BatchQC	Batcl	n ID: 663	325	F	RunNo: 86930							
Prep Date:	Analysis [Date: 4/ 1	1/2022	5	SeqNo: 30	071467	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Acenaphthene	47	5.0	100.0	0	47.3	35.1	135	0.519	20			
Acenaphthylene	47	5.0	100.0	0	47.2	36.1	131	3.56	20			
Aniline	53	5.0	100.0	0	53.3	15	128	2.51	20			
Anthracene	81	5.0	100.0	0	81.3	59.2	129	2.65	20			
zobenzene	73	5.0	100.0	0	72.8	54.7	134	4.57	20			
Benz(a)anthracene	88	5.0	100.0	0	87.6	60.3	130	2.25	20			
Benzo(a)pyrene	88	5.0	100.0	0	88.3	60.6	145	1.56	20			
lenzo(b)fluoranthene	87	5.0	100.0	0	87.2	59.3	146	0.415	20			
Benzo(g,h,i)perylene	87	5.0	100.0	0	87.2	57.6	146	1.09	20			
Benzo(k)fluoranthene	90	5.0	100.0	0	89.6	55	151	3.75	20			
Benzoic acid	45	20	100.0	0	44.9	21.8	98.2	0.822	20			
Benzyl alcohol	65	5.0	100.0	0	64.8	22.7	145	2.78	20			
Bis(2-chloroethoxy)methane	58	5.0	100.0	0	57.8	25.2	134	1.62	20			
lis(2-chloroethyl)ether	60	5.0	100.0	0	60.3	19.8	141	1.25	20			
lis(2-chloroisopropyl)ether	54	5.0	100.0	0	54.5	16.1	137	2.95	20			
is(2-ethylhexyl)phthalate	92	10	100.0	0	92.0	69	132	2.00	20			
-Bromophenyl phenyl ether	73	5.0	100.0	0	73.4	52.1	138	3.32	20			
Sutyl benzyl phthalate	90	5.0	100.0	0	90.2	70.1	128	0.204	20			
Carbazole	79	5.0	100.0	0	79.2	63.9	128	4.91	20			
-Chloro-3-methylphenol	63	5.0	100.0	0	62.5	53.9	129	0.721	20			
-Chloroaniline	58	5.0	100.0	0	57.7	19.4	143	2.20	20			
-Chloronaphthalene	39	5.0	100.0	0	38.9	25.6	133	2.02	20			
-Chlorophenol	57	5.0	100.0	0	56.9	16.1	144	0.771	20			
-Chlorophenyl phenyl ether	60	5.0	100.0	0	60.1	49	131	0.848	20			
Chrysene	86	5.0	100.0	0	86.4	60.9	135	3.68	20			
Di-n-butyl phthalate	85	10	100.0	0	85.2	63.2	136	2.66	20			
Di-n-octyl phthalate	93	20	100.0	0	92.7	67.9	132	1.16	20			
Dibenz(a,h)anthracene	82	5.0	100.0	0	82.0	59.5	145	2.56	20			
Dibenzofuran	58	5.0	100.0	0	57.7	40.2	136	0.477	20			
,2-Dichlorobenzene	24	5.0	100.0	0	23.6	15	106	1.55	20			
,3-Dichlorobenzene	21	5.0	100.0	0	21.3	15	100	0.366	20			
,4-Dichlorobenzene	23	5.0	100.0	0	23.4	15	99.1	6.30	20			
,3'-Dichlorobenzidine	ND	5.0	100.0	0	4.25	72.3	127	0	20	S		
Diethyl phthalate	77	10	100.0	0	77.3	55.9	140	0.0661	20			
Dimethyl phthalate	74	10	100.0	0	73.6	57.1	133	8.26	20			
,4-Dichlorophenol	60	5.0	100.0	0	60.4	24.2	138	2.94	20			
2,4-Dimethylphenol	48	5.0	100.0	0	47.5	23.3	135	0.958	20			
I,6-Dinitro-2-methylphenol	80	20	100.0	0	80.5	45.4	138	4.29	20			
2,4-Dinitrophenol	65	20	100.0	0	64.8	44.4	126	9.01	20			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

2203A30 13-Apr-22

WO#:

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Icsr-66325	Samp	Гуре: LC	SD4	Tes	tCode: EF	PA Method	8270C: Semiv	olatiles		
Client ID: BatchQC	Batc	h ID: 663	325	F	RunNo: 86	6930				
Prep Date:	Analysis [Date: 4/ 1	1/2022	5	SeqNo: 30	071467	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	70	5.0	100.0	0	69.7	63.8	136	1.29	20	
2,6-Dinitrotoluene	64	5.0	100.0	0	63.9	55.8	135	7.82	20	
- Iuoranthene	87	10	100.0	0	86.5	63.9	137	3.79	20	
luorene	63	5.0	100.0	0	62.6	51.8	131	1.16	20	
Hexachlorobenzene	73	5.0	100.0	0	73.3	43.7	146	7.51	20	
Hexachlorobutadiene	13	5.0	100.0	0	12.8	15	109	0.954	20	S
Hexachlorocyclopentadiene	19	5.0	100.0	0	19.4	15	112	7.09	20	
Hexachloroethane	17	5.0	100.0	0	16.6	15	89.4	3.82	20	
ndeno(1,2,3-cd)pyrene	84	5.0	100.0	0	83.6	61.6	140	0.647	20	
sophorone	62	5.0	100.0	0	62.5	24.8	121	1.54	20	
-Methylnaphthalene	32	5.0	100.0	0	31.7	32.9	124	2.27	20	S
2-Methylnaphthalene	29	5.0	100.0	0	29.1	20.4	129	1.94	20	
2-Methylphenol	57	5.0	100.0	0	56.8	18.7	143	0.292	20	
3+4-Methylphenol	58	5.0	100.0	0	58.1	19.4	138	0.515	20	
N-Nitrosodi-n-propylamine	64	5.0	100.0	0	63.7	22.3	137	2.52	20	
N-Nitrosodimethylamine	58	5.0	100.0	0	58.4	15	124	0.715	20	
N-Nitrosodiphenylamine	64	5.0	100.0	0	64.3	54.5	131	0.318	20	
Naphthalene	31	5.0	100.0	0	30.8	15	124	0.425	20	
?-Nitroaniline	67	5.0	100.0	0	66.8	55.1	134	3.69	20	
3-Nitroaniline	73	5.0	100.0	0	73.1	15	229	6.49	20	
I-Nitroaniline	77	5.0	100.0	0	77.1	63.3	136	2.93	20	
Nitrobenzene	61	5.0	100.0	0	61.4	21.8	134	3.09	20	
2-Nitrophenol	60	5.0	100.0	0	60.2	21.4	140	10.7	20	
I-Nitrophenol	47	10	100.0	0	47.5	39.7	84.3	1.13	20	
Pentachlorophenol	55	20	100.0	0	54.7	52.6	146	0.187	20	
Phenanthrene	80	5.0	100.0	0	79.9	63.1	130	0.0348	20	
Phenol	36	5.0	100.0	0	36.0	15	88.4	4.33	20	
Pyrene	90	5.0	100.0	0	89.5	59.5	135	1.84	20	
Pyridine	38	10	100.0	0	37.7	15	116	4.43	20	
1,2,4-Trichlorobenzene	20	5.0	100.0	0	20.4	15	115	0.904	20	
2,4,5-Trichlorophenol	57	5.0	100.0	0	57.0	47.2	132	6.59	20	
2,4,6-Trichlorophenol	54	5.0	100.0	0	54.1	41.7	134	2.84	20	
Surr: 2-Fluorophenol	150		300.0	-	50.6	29.4	87.7	0		
Surr: Phenol-d5	120		300.0		39.6	28.5	64.7	0		
Surr: 2,4,6-Tribromophenol	230		300.0		77.0	18.6	129	0		
Surr: Nitrobenzene-d5	120		200.0		58.1	36.9	103	0		
Surr: 2-Fluorobiphenyl	85		200.0		42.3	38.1	99.9	0		
Surr: 4-Terphenyl-d14	170		200.0		83.2	48	155	0		

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: Ics-1 100.2uS eC SampType: Ics TestCode: SM2510B: Specific Conductance

Client ID: LCSW Batch ID: R86681 RunNo: 86681

Prep Date: Analysis Date: 3/22/2022 SeqNo: 3060544 Units: µmhos/cm

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Conductivity 110 10 100.0 0 108 85 115

Sample ID: Ics-2 100.2uS eC SampType: Ics TestCode: SM2510B: Specific Conductance

Client ID: LCSW Batch ID: R86681 RunNo: 86681

Prep Date: Analysis Date: 3/22/2022 SeqNo: 3060570 Units: µmhos/cm

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Conductivity 100 10 100.2 0 104 85 115

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2203A30**

is Laboratory, Inc. 13-Apr-22

Client: CMB Environmental

Project: Energy Resources Corp West Lovington

Sample ID: MB-66320 SampType: MBLK TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: PBW Batch ID: 66320 RunNo: 86707

Prep Date: 3/22/2022 Analysis Date: 3/24/2022 SeqNo: 3061447 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Total Dissolved Solids ND 20.0

Sample ID: LCS-66320 SampType: LCS TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: LCSW Batch ID: 66320 RunNo: 86707

Prep Date: 3/22/2022 Analysis Date: 3/24/2022 SeqNo: 3061448 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Total Dissolved Solids 1000 20.0 1000 0 100 80 120

Sample ID: 2203A30-014CDUP SampType: DUP TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: MW-8M Batch ID: 66320 RunNo: 86707

Prep Date: 3/22/2022 Analysis Date: 3/24/2022 SeqNo: 3061467 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Total Dissolved Solids 610 40.0)0000763 10 *D

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 100 of 100

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: CMB Environmental Work Order Number: 2203A30 RcptNo: 1 Mr. S. Lozota Received By: Kasandra Payan 3/18/2022 10:10:00 AM Completed By: Sean Livingston 3/18/2022 10:48:15 AM JA3/18/22 Reviewed By: Chain of Custody 1. Is Chain of Custody complete? Yes V No 🗌 Not Present 2. How was the sample delivered? UPS Log In 3. Was an attempt made to cool the samples? Yes V No L NA T 4. Were all samples received at a temperature of >0° C to 6.0°C No Yes 🗸 NA 🗌 Sample(s) in proper container(s)? No 🗌 Yes 🗸 Sufficient sample volume for indicated test(s)? No T Yes V 2/18/22 7. Are samples (except VOA and ONG) properly preserved? No 🗌 8. Was preservative added to bottles? No 🗹 -NA 🗌 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes V No 🗌 NA 🗌 10. Were any sample containers received broken? Yes 🗌 No V # of preserved bottles checked 11. Does paperwork match bottle labels? No 🗌 Yes 🗸 for pH: (Note discrepancies on chain of custody) ((2) or >12 unless noted) Adjusted? 12. Are matrices correctly identified on Chain of Custody? Yes V No 🗌 13. Is it clear what analyses were requested? Yes 🗸 No 🗌 14. Were all holding times able to be met? Dec 3/18/20 Yes V No 🗌 Checked by: (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes No [NA 🗸 Person Notified: Date: By Whom: eMail Phone Fax In Person Regarding: Client Instructions: - 150mc from Pared 16. Additional remarks: 04+ 001400240034 for 001-003B Shory metals proper pH <2 Scc 3/18/22 ~0.5mL HNUZ 17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Signed By Seal Date 2.4 Good 2 1.4 Good 3.1 Good

MW-3

mw-2

Received by

Relinquished by:

12:00

ANALYSIS LABORATORY

Remarks: ANY QUESTIONS? Please Call CMB 0575, 626, 1615 Sent Copy of RISUITS
To embenviro agmail, con

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Chain-of-Custody Record Client: Clien	Turn-Around Time: Standard Rush Project Name: Energy of Resources Corp West Loving for Strawn Unit as Unit L Sec 34 T165 R35E Project # Eroving Note Montown Note 1 18P-245 Analysis Request Place 20/2 HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request
QA/QC Package: Cmbenvive a g marli Carq Standard	Project Manager: OM Bavnh' PG Sampler: CM Bavnh' PG Sampler: CM Bavnh' PG Pavnh' PG PG PG PG PG PG PG P
Date Time Matrix Sample Name 63/6/2022 1/130 Hz0 MW-85 03/6/22 1/23 Hz0 MW-8M 03/6/22 1/405 Hz0 MW-8D	On Ice: A sea D No # of Cooler Temp(including CF): Container Type and # Type and # Type Type and # Type and # Type and # T
03/16/22 1505 Hz/ MW-75 03/16/22 1625 Hz O MW-7D TRIP Blank Trip Blank Z	2xym Hec 019 016 XXX XX XX XX XX XX XX XX XX
03/17b, 12:00 (Majull	Received by: Via: Date Time Remarks: Any Qurstions? Please Call Combe 575.626.1615 Seceived by: Via: Date Time Remarks: Asap To; Combenviro commail, Constituted to other accredited laboratories. This serves as notice of this pessibility. Assemble stated to other accredited laboratories. This serves as notice of this pessibility. Assemble stated to other accredited laboratories. This serves as notice of this pessibility. Assemble stated to the content of the pessibility.

Appendix E

Historical Data



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					Water Lev	el Elevatio	n (feet msl)				
Well ID	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2012 Q4	2022 Q1	2021 Q3	2017 Q1	2017 Q2	2017 Q3	2017 Q4
MW-1	3,919.17	3,919.15	3,919.16	3,919.05	3,922.16	3,918.44	-	3,919.10	3,919.04	3,919.05	3,919.16
MW-2	3,917.22	3,917.22	3,917.22	3,917.42	3,917.72	3,916.57	-	3,917.17	3,917.39	3,917.42	3,917.39
MW-3	3,917.54	3,917.54	3,917.53	3,917.43	3,920.93	3,916.91	-	3,917.48	3,917.38	3,917.43	3,917.53
MW-4	3,917.13	3,917.13	3,917.13	3,917.00	3,919.79	3,916.57	-	3,917.08	3,916.99	3,917.00	3,916.99
MW-5	3,918.83	3,918.83	3,918.83	3,918.83	3,919.29	3,918.30	-	3,918.77	3,918.70	3,918.83	3,918.70
MW-6	3,917.56	3,917.52	3,917.54	3,917.45	-	3,916.99	-	3,917.52	3,917.40	3,917.45	3,917.54
MW-7S	-	-	-	-	-	3,914.70	3,914.60	-	-	-	-
MW-7M	-	-	-	-	-	3,914.73	3,914.73	-	-	-	-
MW-7D	-	-	-	-	-	3,914.81	3,914.61	-	-	-	-
MW-8S	-	-	-	-	-	3,915.26	3,915.27	-	-	-	-
MW-8M	-	-	-	-	-	3,915.30	3,915.10	-	-	-	-
MW-8D	-	-	-	-	-	3,915.29	3,915.09	-	-	-	-
MW-9S	-	-	-	-	-	3,919.08	3,919.12	-	-	-	-
MW-9M	-	-	-	-	-	3,919.08	3,919.15	-	-	-	-
MW-9D	-	-	-	-	-	3,918.97	3,919.69	-	-	-	-

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										Chloride	Concentrat	ion (ppm)									
Well ID	2002 Q4	2009 Q1	2009 Q4	2009 Q3	2010 Q2	2010 Q1	2012 Q4	2015 Q4	2016 Q4	2016 Q3	2016 Q2	2016 Q1	2017 Q4	2017 Q3	2017 Q2	2017 Q1	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2022 Q1
MW-1	-	-	-	-	-	-	27	27.6	27.7	29.8	19.5	24.5	30.5	28.8	26.4	26.7	26.4	29.1	28.2	29.6	26
MW-2	-	-	-	-	-	-	130	821	869	1450	674	493	836	526	2500	980	1240	1500	1260	1320	1200
MW-3	-	-	-	-	-	-	28	28.5	28	29.7	21.4	24.6	29.7	27.1	26.9	27.4	26.5	27	27.3	-	25
MW-4	-	-	-	-	-	-	390	193	227	255	123	136	217	187	153	154	187	181	180	-	230
MW-5	-	-	-	-	-	-	23	25.1	28.2	26.9	20.2	24	29.1	40.8	25.6	26.2	25.9	25.7	26.6	-	25
MW-6	-	-	-	-	-	-	-	544	1420	1410	1570	1360	1220	1070	2570	1370	983	1120	1200	1250	1000
MW-7D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34
MW-7S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38
MW-8D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
MW-8M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46
MW-8S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
MW-9D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29
MW-9M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46
MW-9S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
Pond Water Well	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32
WLSU #11 windmill	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WLSU #20 water well	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WSLU #8 water well	99	298	2485	4331	440	1101	-	-	-	=	-	-	-	-	-	-	-	-	-	-	-
WSLU #8 Windmill	-	-	-	-	-	=	-	-	-	=	-	-	-	-	-	-	-	-	-	-	24
Battery A water Well	-	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
House Water Well	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Action 392842

CONDITIONS

Operator:	OGRID:
ENERGEN RESOURCES CORPORATION	162928
3510 N A St	Action Number:
Midland, TX 79705	392842
	Action Type:
	[REPORT] Alternative Remediation Report (C-141AR)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Monitoring Report for WLSU #8, content satisfactory 1. Continue groundwater monitoring at the site for chloride plume stability in all 9 wells as proposed. 2. Confirm if chloride remains confined to the east of WLSU 8. 3. Continue conduct groundwater monitoring on schedule as prescribed until all eight (8) consecutive quarterly sample results demonstrate below WQCC standards. 4. Submit the 2024 annual report to OCD, on or before October 2, 2025.	2/21/2025