

ENTERPRISE PRODUCTS PARTNERS L.P. ENTERPRISE PRODUCTS GP, LLC (General Partner) ENTERPRISE PRODUCTS OPERATING LLC

July 1, 2024

Submitted online via OCD E-Permitting: https://www.apps.emnrd.nm.gov/OCD/OCDPermitting/default.aspx

Mr. Nelson Velez New Mexico Energy, Minerals & Natural Resources Department – Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

Submittal1:2023 Groundwater Monitoring Report (Ensolum, April 11, 2024)Submittal2:2022 Groundwater Monitoring Report (Ensolum, March 22, 2023)Submittal3:2021 Groundwater Monitoring Report (Ensolum, March 29, 2022)

**RE:** Enterprise Field Services, LLC

Lateral K-51 Pipeline Release (4/13/2010)

Rio Arriba Co., NM [S34 and 35, T26N R6W (36.4465° N, 107.4461° W)]

OCD RP: 3R-446; Stage 1 AP-130; Incident No. nAUTOFAB00318

Dear Mr. Velez:

Enterprise Products Operating LLC (Enterprise), on behalf of Enterprise Field Services, LLC, is pleased to submit to New Mexico Oil Conservation Department (OCD) one electronic copy (online via OCD E-Permitting) of the above-referenced documents (Submittal1, Submittal2, and Submittal3, collectively "Submittals") prepared by Ensolum, LLC (Ensolum). The Submittals are associated with the Enterprise Lateral K-51 release of natural gas condensate liquids that occurred on April 13, 2010 from a natural gas gathering pipeline, located in Rio Arriba County, New Mexico (the "Site"). Submittal1 summarizes on-site activities that occurred between January 1, 2023 and December 31, 2023 ("reporting period" for Submittal1), Submittal2 summarizes on-site activities conducted between January 1, 2022 and December 31, 2022 ("reporting period" for Submittal3), and Submittal3 summarizes on-site activities conducted between January 1, 2021 and December 31, 2021 ("reporting period" for Submittal3). During each reporting period, on-going groundwater monitoring and sampling (GWM&S) activities were continued to evaluate the magnitude and stability of the dissolved-phase hydrocarbon (DPH) plume in groundwater.

Data presented in the attached Submittals indicate that only the benzene concentrations in monitoring well MW-19 remain in excess of applicable New Mexico Water Quality Control Commission (NMWQCC) Groundwater Quality standards (GQS) and constituents of concern (COC) concentrations are generally stable and/or declining at the Site. Phase-separated hydrocarbon (PSH) has not been observed at the Site, with the exception of two anomalous events in 2012 (MW-19), which were not visually confirmed. The DPH plume is not currently delineated to the southwest of MW-19 due to an obstruction (silted in or collapsed) of MW-18; however, historical COC concentrations were all below laboratory detection limits for MW-18. Additionally, in comparing current COC data to historical data, the COC exceedances identified at MW-19 appear to be associated with another historical release source. COCs in the original release area have been below laboratory detection limits and/or applicable NMWQCC GQSs since November 2016, or earlier.

Based on the data contained within the attached Submittals, Enterprise plans to: 1) continue conducting semi-annual GWM&S events with annual sampling of monitoring wells MW-3 and MW-11 through MW-13 (as per OCD approval email dated June 8, 2020); 2) install a shallow recovery well up-gradient of monitoring well MW-19 to facilitate enhanced fluid recovery; 3) repair or replace monitoring well MW-18 as described in the *Stage 1 Abatement Plan* (Ensolum, revised May 22, 2019); 4) potentially conduct additional site-specific aquifer characterization; and, 5) prepare a *Stage 2 Abatement Plan*, if required, after concurrence that the *Stage 1 Abatement Plan* is deemed administratively complete.

Enterprise appreciates the OCD's continued assistance and guidance in bringing closure to this Site. Should you have any questions, comments, or concerns, or require additional information, please contact Scott Drewry via email (<a href="mailto:sdrewry@eprod.com">sdrewry@eprod.com</a>) or phone (713-381-5696), or our project consultant Kyle Summers (<a href="mailto:ksummers@ensolum.com">ksummers@ensolum.com</a>) with Ensolum.

Sincerely,

Jon E. Fields
Director, Environmental

cc: BLM, Farmington, NM - Mr. J. Nolan Craun <6251 College Blvd., Suite A, Farmington, NM 87402>

Landowner – Mr. Russell Luna < PO Box 753, Bloomfield, NM 87413-0753>

ec: Ensolum, Houston, TX – Mr. Kyle Summers < <u>ksummers@ensolum.com</u> >



### 2021 GROUNDWATER MONITORING REPORT

### Property:

Lateral K-51 Pipeline Release (2010)
Unit Letter H of S34 and Unit Letter E of S35, T26N R6W
Rio Arriba County, New Mexico

New Mexico EMNRD OCD RP No. 3RP-446 Abatement Plan No. 130 Incident ID No. nAUTOfAB000318

> March 29, 2022 Ensolum Project No. 05A1226010

> > Prepared for:

Enterprise Field Services, LLC P.O. Box 4324 Houston, Texas 77210-4324 Attn: Mr. Gregory E. Miller, PG

Prepared by:

Landon Daniell Staff Geologist

Kyle Summers Senior Project Manager



### 2021 GROUNDWATER MONITORING REPORT EXECUTIVE SUMMARY

This report documents the 2021 groundwater monitoring activities conducted at the Lateral K-51 Pipeline Release (2010) site, referred to hereinafter as the "Site". The Site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in Sections 34 and 35, Township 26 North, Range 6 West, in Rio Arriba County, New Mexico.

On April 13, 2010, a release of natural gas condensate occurred from the Lateral K-51 pipeline. The initial site assessment identified concentrations of constituents of concern (COCs) in soil and groundwater above the applicable New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria and the New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs). Delineation and initial excavation activities conducted between June 2010 and March 2012 identified additional concentrations of COCs above the applicable New Mexico EMNRD OCD closure criteria for soils and above the New Mexico WQCC GQSs for groundwater. During 2011, in-situ chemical oxidation (ISCO) was performed in the immediate area of the release.

Quarterly and semi-annual groundwater monitoring was conducted from 2012 through 2014, and 2015 through 2020, respectively. Groundwater samples collected during these sampling events exhibited concentrations of COCs above the WQCC standards.

The primary objective of the 2021 groundwater monitoring was to further evaluate the concentrations of COCs in groundwater and to monitor COC concentrations over time at the Site.

Findings based on these activities are as follows:

- The groundwater flow direction at the Site is generally towards the west-northwest, with an approximate average gradient of 0.008 feet per foot (ft/ft) across the Site.
- Benzene was reported at concentrations exceeding the New Mexico WQCC GQS of 10 micrograms
  per liter (μg/L) in groundwater samples collected from monitoring well MW-19 during the May 2021 and
  November 2021 sampling events. The groundwater samples collected from the other monitoring wells
  sampled in 2021 do not exhibit COC concentrations above the applicable WQCC GQSs (see footnote
  in report).
- Monitoring well MW-19 has exhibited relatively stable benzene concentrations since 2012.

Ensolum offers the following recommendations:

- Report the groundwater monitoring results to the New Mexico EMNRD OCD.
- Continue semi-annual groundwater monitoring at the Site to monitor COCs in groundwater, limiting the sampling frequency of monitoring wells MW-3, MW-11, MW-12, and MW-13 to annually, as approved by the New Mexico EMNRD OCD in an email dated June 8, 2020.
- Conduct aquifer testing, install a shallow recovery well upgradient of monitoring well MW-19, and repair
  or replace monitoring well MW-18, as described in the Stage 1 Abatement Plan and as approved by
  the New Mexico EMNRD OCD in an email dated June 8, 2020.

**Executive Summary** 



### **TABLE OF CONTENTS**

1.0	INTRODUCTION	<b>1</b>
	1.2 Project Objective	2
2.0	GROUNDWATER MONITORING	2
	2.1 Groundwater Sampling Program	2
	2.2 Groundwater Laboratory Analytical Methods	3
	2.3 Groundwater Flow Direction	3
	2.4 Data Evaluation	4
3.0	FINDINGS	5
4.0	RECOMMENDATIONS	5
5.0	STANDARDS OF CARE, LIMITATIONS, AND RELIANCE	5
	5.1 Standard of Care	
	5.2 Limitations	5
	5.3 Reliance	6

LIST OF APPE	NDICES	
Appendix A:	Figures Figure 1 Figure 2 Figure 3 Figure 4A Figure 4B Figure 5A Figure 5B	Topographic Map Site Vicinity Map Site Map Groundwater Gradient Map (May 2021) Groundwater Gradient Map (November 2021) Groundwater Quality Standard (GQS) Exceedance Zone Map (May 2021) Groundwater Quality Standard (GQS) Exceedance Zone Map (November 2021)
Appendix B:	<b>Tables</b> Table 1 Table 2	Groundwater Analytical Summary Groundwater Elevations
Appendix C:		v Data Sheets & ustody Documentation



### 1.0 INTRODUCTION

This report documents the 2021 groundwater monitoring activities at the Lateral K-51 Pipeline Release (2010) site, referred to hereinafter as the "Site".

### 1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral K-51 Pipeline Release (2010)
Incident ID	nAUTOfAB000318
Location:	36.4465° North, 107.4461° West Unit Letter H of Section 34 and Unit Letter E of Section 35, Township 26 North, Range 6 West Rio Arriba County, New Mexico
Property:	United States (US) Bureau of Land Management (BLM) and Private Land
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On April 13, 2010, an estimated ten barrels of natural gas condensate were released from the Enterprise Lateral K-51 pipeline. The pipeline was subsequently repaired, and remediation activities were initiated to remove hydrocarbon affected soils. Souder, Miller and Associates (SMA) collected confirmation soil samples and one groundwater sample from the final excavation. The excavation was then backfilled with unaffected soils. Confirmation soil samples collected from the excavation exhibited concentrations of constituents of concern (COCs) above the applicable EMNRD OCD closure criteria for soils. The groundwater sample exhibited concentrations of COCs above the New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) for groundwater.

During June 2010, eight soil borings (BH-1 through BH-8) were advanced by LT Environmental (LTE). Four of the soil borings were completed as groundwater monitoring wells (MW-1 through MW-4). Analytical results from soil samples collected immediately adjacent to the release and near the groundwater interface (BH-1) indicated COC concentrations above the applicable New Mexico EMNRD OCD closure criteria. Analysis of groundwater samples collected from monitoring wells MW-1 through MW-4 indicated COC concentrations above the New Mexico WQCC GQSs (Site Investigation Report, LTE, August 9, 2010).

During April 2011, nine soil borings/monitoring wells (SB-9, SB-10, MW-11 through MW-14, SB-15, MW-16, and MW-17) were advanced by Southwest Geoscience (SWG) to further evaluate the extent of dissolved phase COCs in groundwater. Additionally, 15 injection points were installed to facilitate the proposed in-situ chemical oxidation (ISCO) of the COCs utilizing a hydrogen peroxide solution. ISCO activities were performed during May 2011 (*Supplemental Site Investigation and Corrective Action Report*, SWG, October 5, 2011). Based on the distribution of COCs in groundwater, it appears that a former drip valve, tank, or pit may have also provided a historic source of petroleum hydrocarbon impact to groundwater (New Mexico EMNRD OCD reference 3RP-206, *El Paso Natural Gas, Final Pit Closure*) in the vicinity of monitoring well MW-14.

During March 2012, three additional soil borings/monitoring wells (MW-18, MW-19, and MW-20) were advanced near and downgradient of the historic release area to further evaluate the extent of COCs in groundwater (*Supplemental Site Investigation & Corrective Action Work Plan*, SWG, April 23, 2012). Soil boring/monitoring well MW-18 was advanced to the west of the presumed location of the historic release,



and soil borings/monitoring wells MW-19 and MW-20 were advanced to the north and northwest of the presumed location of the historic release.

Quarterly and semi-annual groundwater monitoring was conducted from 2012 through 2014, and 2015 through 2018, respectively. During February 2019, Enterprise assigned management of the project to Ensolum, LLC (Ensolum).

During May of 2019, Enterprise submitted a revised Stage 1 Abatement Plan for this Site to the New Mexico EMNRD OCD (*Revised Lateral K-51 Pipeline Release (2010) Stage 1 Abatement Plan*, Ensolum, May 22, 2019). The New Mexico EMNRD OCD has not approved the plan, and Enterprise has resumed semi-annual groundwater monitoring of the Site.

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites that are subject to reporting and/or corrective action. Additionally, the New Mexico EMNRD OCD utilizes the New Mexico WQCC GQS (NMAC 20.6.2 *Ground and Surface Water Protection*) to evaluate groundwater conditions.<sup>1</sup>

The Site location is depicted on **Figure 1** of **Appendix A** which was reproduced from a portion of a United States Geological Survey (USGS) 7.5-minute series topographic map. A **Site Vicinity Map**, created from an aerial photograph, is provided as **Figure 2**, and a **Site Map**, which indicates the approximate locations of the monitoring wells and previous soil boring locations in relation to pertinent structures and general Site boundaries, is included as **Figure 3** of **Appendix A**.

### 1.2 Project Objective

The objective of the groundwater monitoring was to further evaluate groundwater quality at the Site and evaluate natural attenuation of COC concentrations over time.

### 2.0 GROUNDWATER MONITORING

### 2.1 Groundwater Sampling Program

Ensolum conducted groundwater sampling events during May 2021 and November 2021. The groundwater sampling program consisted of the collection of one groundwater sample from each of the viable monitoring wells at the Site. Monitoring well MW-18 appears to be obstructed (silted in or collapsed) and was not sampled during either sampling event. On June 8, 2020, the New Mexico EMNRD OCD approved a request to reduce the sampling frequency for monitoring wells MW-3 and MW-11 through MW-13 to annually. Therefore, only eight monitoring wells were sampled during the November 2021 sampling event.

Ensolum's groundwater sampling program consisted of the following:

- Prior to sample collection, Ensolum gauged the depth to fluids in each monitoring well using an interface probe capable of detecting non-aqueous phase liquid (NAPL).
- Each designated monitoring well was sampled utilizing micro-purge low-flow sampling techniques. Following the completion of the micro-purge process, the groundwater sample was collected.

Page 2

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to sites that predate the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



- Low-flow or low-stress sampling refers to sampling methods that are intended to minimize the stress that is imparted to the formation pore water in the vicinity of the well screen. Water level drawdown provides the best indication of the stress that is imparted by a given flow rate for a given hydrological situation. Pumping rates of 0.1 to 0.5 liters per minute (L/min) are typically maintained during the low-flow/low-stress sampling activities, using dedicated or decontaminated sampling equipment.
- During low-flow sampling, the groundwater samples are collected from each monitoring well once
  produced groundwater is consistent in color, clarity, pH, temperature, and conductivity.
  Measurements are typically observed every three to five minutes while purging. Purging is
  considered complete once key parameters (especially pH and conductivity) have stabilized for at
  least three consecutive readings.
- Groundwater samples were collected in laboratory-supplied containers (pre-preserved with mercuric chloride (HgCl<sub>2</sub>)), labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico under proper chainof-custody procedures.

### 2.2 Groundwater Laboratory Analytical Methods

The groundwater samples collected from the monitoring wells during the two sampling events were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) utilizing US Environmental Protection Agency (EPA) SW-846 Method #8021 or #8260.

A summary of the analytes, sample matrix, sample frequency and EPA-approved analytical methods are presented in the following table.

Analytes			EPA Method
ВТЕХ	Groundwater	12/8	SW-846 8021 or 8260

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

### 2.3 Groundwater Flow Direction

Each monitoring well has been geospatially surveyed to determine the top-of-casing (TOC) elevation. Prior to sample collection, Ensolum gauged the depth to fluids in each monitoring well. The groundwater flow direction at the Site is generally toward the west-northwest. The calculated gradient during both monitoring events averaged approximately 0.008 feet per foot (ft/ft) across the Site.

Groundwater elevation data collected during the May 2021 and November 2021 gauging events are presented (as well as historical gauging data) in **Table 2** (**Appendix B**). Groundwater gradient maps prepared for the May 2021 and November 2021 gauging events are included as **Figure 4A** and **4B** (**Appendix A**).

Page 3



#### 2.4 Data Evaluation

Ensolum compared the BTEX laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the groundwater samples collected during the May 2021 and November 2021 groundwater sampling events to the New Mexico WQCC GQSs.¹ The results of the analyses are summarized in **Table 1** of **Appendix B**. Groundwater Quality Standard Exceedance Zone maps are provided as **Figures 5A** and **5B** of **Appendix A**.

### May 2021

- The May 2021 analytical result for monitoring well MW-19 indicates a benzene concentration of 120 micrograms per liter (μg/L), which exceeds the WQCC GQS of 10 μg/L.<sup>1</sup> The analytical results for the other sampled monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 10 μg/L.<sup>1</sup>
- The May 2021 analytical results for the sampled monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 µg/L.<sup>1</sup>
- The May 2021 analytical result for monitoring well MW-19 indicates an ethylbenzene concentration of 63 μg/L, which is below the WQCC GQS of 750 μg/L.¹ The analytical results for the other sampled monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 μg/L.¹
- The May 2021 analytical results for monitoring wells MW-4 and MW-19 indicate total xylene concentrations of 2.9 μg/L and 19 μg/L, respectively, which are below the WQCC GQS of 620 μg/L.¹ The analytical results for the other sampled monitoring wells do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 μg/L.¹
- No data qualifier flags are associated with the May 2021 analytical results.

### November 2021

- The November 2021 analytical result for monitoring well MW-19 indicates a benzene concentration of 160 μg/L, which exceeds the WQCC GQS of 10 μg/L.¹ The analytical results for the other sampled monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 10 μg/L.¹
- The November 2021 analytical results for the sampled monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 μg/L.¹
- The November 2021 analytical result for monitoring well MW-19 indicates an ethylbenzene concentration of 85 μg/L, which is below the WQCC GQS of 750 μg/L.¹ The analytical results for the other sampled monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 μg/L.¹
- The November 2021 analytical result for monitoring well MW-19 indicates a total xylenes concentration
  of 14 μg/L, which is below the WQCC GQS of 620 μg/L. <sup>1</sup> The analytical results for the other sampled
  monitoring wells do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are
  below the WQCC GQS of 620 μg/L.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to sites that predate the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



• No data qualifier flags are associated with the November 2021 analytical results.

#### 3.0 FINDINGS

Based on the evaluation of the analytical results from the May 2021 and November 2021 groundwater sampling events, Ensolum presents the following findings:

- The groundwater flow direction at the Site is generally towards the west-northwest, with an approximate gradient of 0.008 ft/ft across the Site.
- Benzene was reported at concentrations exceeding the New Mexico WQCC GQS of 10 µg/L in groundwater samples collected from monitoring well MW-19 during the May 2021 and November 2021 sampling events. The groundwater samples collected from the other sampled monitoring wells in 2021 do not exhibit COC concentrations above the applicable WQCC GQSs.<sup>1</sup>
- Monitoring well MW-19 has exhibited relatively stable benzene concentrations since 2012.

#### 4.0 RECOMMENDATIONS

Based on the results of groundwater monitoring activities, Ensolum has the following recommendations:

- Report the groundwater monitoring results to the New Mexico EMNRD OCD.
- Continue semi-annual groundwater monitoring at the Site to monitor COCs in groundwater, limiting the sampling frequency of monitoring wells MW-3, MW-11, MW-12, and MW-13 to annually, as approved by the New Mexico EMNRD OCD in an email dated June 8, 2020.
- Conduct aquifer testing, install a shallow recovery well upgradient of monitoring well MW-19, and repair
  or replace monitoring well MW-18, as described in the Stage 1 Abatement Plan and as approved by
  the New Mexico EMNRD OCD in an email dated June 8, 2020.

### 5.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

#### 5.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

### 5.2 Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to sites that predate the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendations are based solely upon data available to Ensolum at the time of these services.

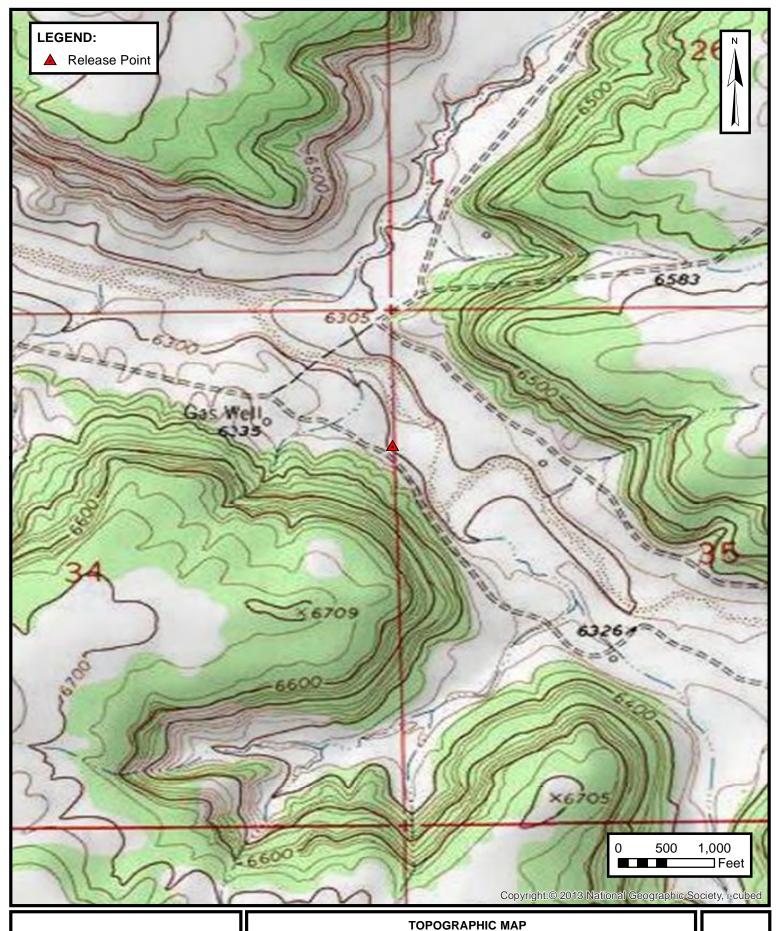
### 5.3 Reliance

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



**APPENDIX A** 

Figures



**ENSOLUM** 

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ENTERDRICE FIELD CERVICES

ENTERPRISE FIELD SERVICES, LLC
LATERAL K-51 PIPELINE RELEASE
Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico
36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

FIGURE

1



## **ENSOLUM**

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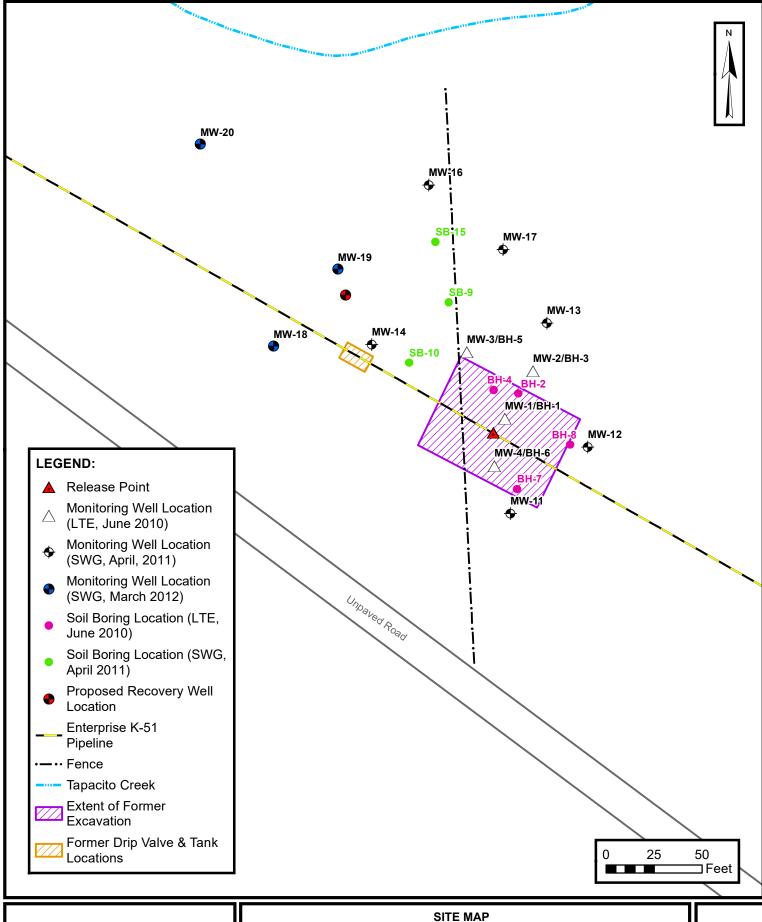
### SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL K-51 PIPELINE RELEASE
Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico
36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

**FIGURE** 

2



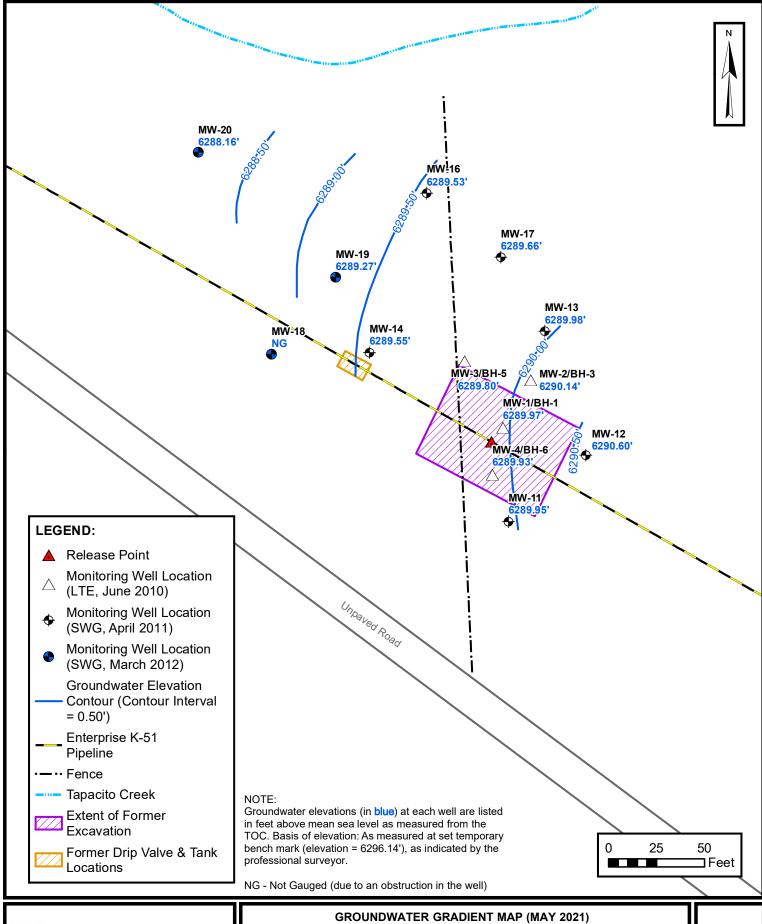


Environmental & Hydrogeologic Consultants

ENTERPRISE FIELD SERVICES, LLC LATERAL K-51 PIPELINE RELEASE
Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

**FIGURE** 



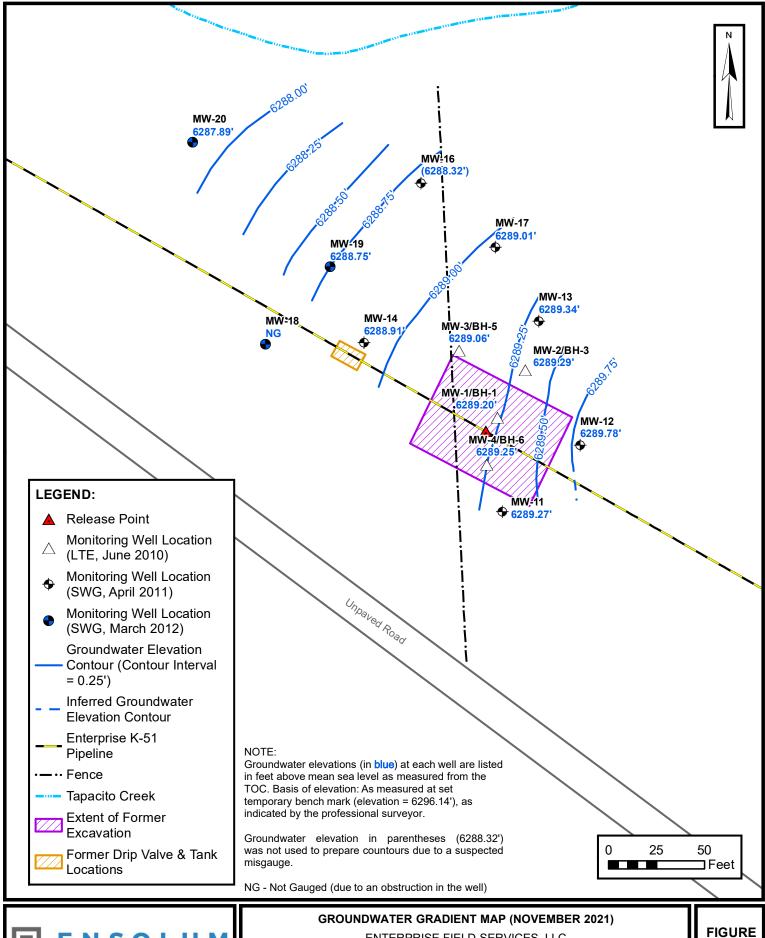
### **ENSOLUM**

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ENTERPRISE FIELD SERVICES, LLC
LATERAL K-51 PIPELINE RELEASE
Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico
36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

FIGURE **4** 



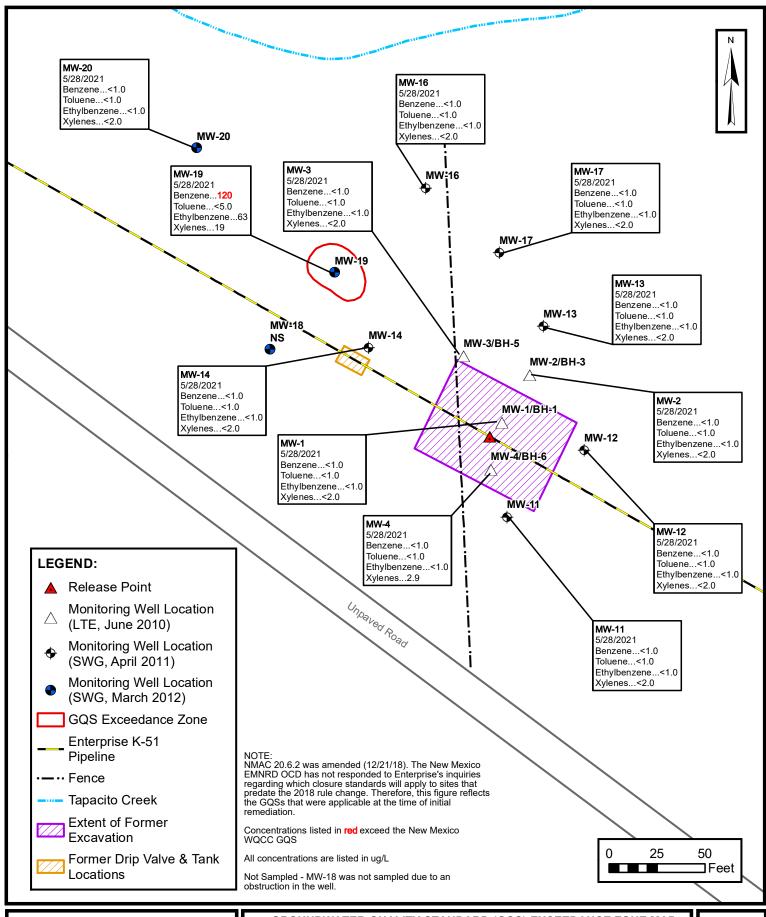


Environmental & Hydrogeologic Consultants

ENTERPRISE FIELD SERVICES, LLC LATERAL K-51 PIPELINE RELEASE Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

4B





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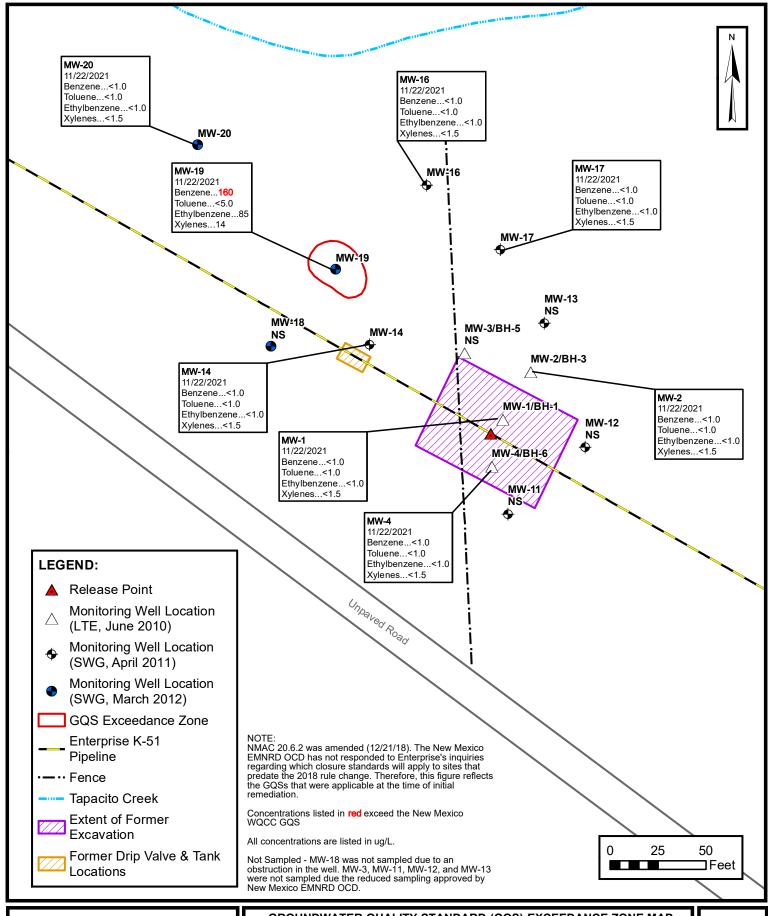
## GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (MAY 2021)

ENTERPRISE FIELD SERVICES, LLC LATERAL K-51 PIPELINE RELEASE

Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

FIGURE **5A** 



**ENSOLUM** 

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GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP
(NOVEMBER 2021)

ENTERPRISE FIELD SERVICES, LLC

LATERAL K-51 PIPELINE RELEASE
Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

FIGURE **5B** 



**APPENDIX B** 

**Tables** 



GROUNDWATER ANALYTICAL SUMMARY										
Sample I.D.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH			
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO			
						(mg/L)	(mg/L)			
	ality Control Commmission	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE			
Groundwater	Quality Standards	10	730	730	020	NZ.	IVE			
			Sample - Open							
Excavation	4.21.10	7,000	13,000	540	5,200	NA	NA			
	6.21.10	8,400	toring Wells Ins	560	4,200	NA	NA			
	9.24.10	2,300	28	200	520	8.4	<1.0			
	4.21.11	430	<20	120	60	2.1	<1.0			
	6.21.11	820	370	33	140	5.1	130			
	9.22.11 12.13.11	690 260	<b>1,200</b> 250	120 54	1,200 650	8.9 3.4	30 <1.0			
	3.20.12	280	230	94	550	3.5	<1.0			
	6.19.12	300	<5.0	81	96	1.7	<1.0			
	9.20.12*	45	3.4	15	23	0.45	<1.0			
	12.17.12	34	<1.0	11	16	0.19	<1.0			
	3.25.13 6.27.13	41 24	<1.0 <1.0	19 <1.0	32 36	0.27 0.22	<1.0 <1.0			
	10.22.13	39	<1.0	24	13	0.23	<1.0			
	12.16.13	10	<1.0	14	11	0.18	<1.0			
MW-1	4.18.14	23	<1.0	28	86	0.38	1.1			
	11.6.14 5.29.15	32 11	<1.0 <1.0	27 21	61 55	NA NA	NA NA			
	12.1.15	5.3	<1.0	4.0	6.2	NA NA	NA NA			
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.08.16	17	<1.0	1.6	2.4	NA	NA			
	5.30.17 12.07.17	4.1 2.8	<1.0 <1.0	<1.0 2.0	<1.5 <1.5	NA NA	NA NA			
	5.30.18	3.0	<1.0	<1.0	2.2	NA NA	NA NA			
	11.02.18	1.2	<1.0	<1.0	<1.5	NA	NA			
	9.25.19 2.4.20	1.8 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	NA NA	NA NA			
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA			
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.28.21 11.22.21	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <1.5	NA NA	NA NA			
	6.21.10	200	53	14	96	NA NA	NA NA			
	9.24.10	2.3	<1.0	<1.0	<2.0	<0.050	<1.0			
	4.21.11	3.3	<1.0	<1.0	<2.0	0.065	<1.0			
	6.21.11 9.22.11	2.2 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0			
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	9.19.12 12.17.12	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0			
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.13.13 4.17.14	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0			
MW-2	11.6.14	<1.0	<1.0	<1.0 <1.0	<2.0	<0.050 NA	<1.0 NA			
	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA			
	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.25.16 11.08.16	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	NA NA	NA NA			
	5.26.17	<1.0	<1.0	<1.0	<2.0 <1.5	NA NA	NA NA			
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.01.18 9.20.19	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.5 <2.0	NA NA	NA NA			
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA			
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA			
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.28.21 11.22.21	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0	NA NA	NA NA			
<u> </u>	11.22.21	<u> </u>	<b>\1.0</b>	<b>\1.0</b>	<1.5	INA	INA			

Page 1 of 7



Sample I.D. Date		Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.	Date			•		GRO	DRO
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE NE
	6.21.10	640	57	72	1,000	NA	NA
	9.24.10	150	<1.0	16	28	0.48	<1.0
	4.21.11	52	<1.0	17	10	0.25	<1.0
	6.21.11	62	14	13	160	0.67	<1.0
	9.22.11	3	<1.0	8.7	<2.0	0.066	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	1.3 3.1	<1.0 <1.0	1.9 1.4	<2.0 <2.0	<0.050 <0.050	<1.0
	6.19.12 9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0 <1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-3	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
5	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA NA
	5.28.15	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA
	12.1.15 5.26.16	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	NA NA	NA NA
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA
	5.30.17	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA
	12.07.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA
	11.11.20	<1.0	<1.0 <1.0	<1.0 <1.0	<1.5 <2.0	NA NA	NA NA
	5.28.21 11.22.21 <sup>b</sup>	<1.0 NS	NS	NS	NS	NS NS	NS NS
	6.21.10	3,600	10,000	600	6,600	NA NA	NA NA
	9.24.10	870	870	260	1,600	12	1
	4.21.11	670	<20	520	790	6.3	<1.0
	6.21.11	17	22	36	77	0.64	1.1
	9.22.11	62	140	220	820	3.8	1.2
	12.13.11	84	<20	430	490	2.6	<1.0
	3.20.12	36	<20	1,100	1,400	6.5	<1.0
	6.19.12	<b>37</b> 9.4	<5.0	250 74	350 97	2.2	<1.0
	9.19.12 12.17.12	9.4 <1.0	1.4 <1.0	6.2	9.7	0.84 0.12	<1.0 <1.0
	3.25.13	3.2	<1.0	51	55	1.0	<1.0
	6.27.13	3.9	<1.0	61	60	1.3	<1.0
	10.22.13	<1.0	<1.0	12	3.8	0.13	<1.0
	12.13.13	<1.0	<1.0	16	6.2	0.4	<1.0
MW-4	4.17.14	<1.0	<1.0	76	14	0.78	<1.0
	11.6.14	<1.0	<1.0	11	2.9	NA	NA NA
	5.29.15	<1.0	<1.0	24	6.1	NA NA	NA NA
	12.1.15 5.25.16	<1.0 <1.0	<1.0 <1.0	2.5 7.4	2.1 <2.0	NA NA	NA NA
	11.08.16	2.4	<1.0	4.8	2.1	NA NA	NA NA
	5.26.17	<1.0	<1.0	3.9	<1.5	NA NA	NA NA
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA
	11.11.20 5.28.21	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.5 2.9	NA NA	NA NA
	11.22.21	<1.0	<1.0	<1.0	2.9 <1.5	NA NA	NA NA
	11.44.41	-1.0	-1.0	11.0	٧١.٥	14/1	14/1



GROUNDWATER ANALYTICAL SUMMARY									
Sample I.D.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH		
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO		
		(1-9)	(1-3)	(1-3)	(1-9)	(mg/L)	(mg/L)		
						(3. =/	(3)		
	ality Control Commmission	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE		
Groundwater (	Quality Standards		, 55		020				
	Monitoring	Wells Installed	by Apex TITAN	(formerly Southwe	est Geoscience)				
	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	3.20.12	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0		
	6.19.12	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0		
	9.19.12	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0		
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
MW-11	11.6.14	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA		
	5.29.15 11.30.15	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	NA NA	NA NA		
	5.25.16	<1.0	<1.0	<1.0	<2.0 <2.0	NA NA	NA NA		
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA		
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA		
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA NA		
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA		
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA		
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA		
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA		
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA		
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA		
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA		
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS		
	4.21.11	1.9	<1.0	<1.0	<2.0	<0.050	<1.0		
	6.21.11	4.6	<1.0	<1.0	<2.0	0.063	<1.0		
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.13.11	<1.0	<1.0	<1.0 <1.0	<2.0	<0.050	<1.0 <1.0		
	3.20.12 6.19.12	<1.0 1.7	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0		
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
MW-12	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA		
1V1V V - 1Z	5.29.15	<1.0	<1.0	<1.0	<2.0	NA	NA		
	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA		
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA		
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA		
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA		
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA		
	5.30.18	<1.0 <1.0	<1.0 <1.0	<1.0	<1.5 <1.5	NA NA	NA NA		
	11.01.18 9.20.19	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.5 <2.0	NA NA	NA NA		
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA		
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA		
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA		
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA		
	11.22.21°	NS	NS	NS	NS NS	NS	NS		
	1								



Commis I D	Dete	D	Taluana	Etherille among	Vidence	TDU	TDU	
Sample I.D.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH	
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO	
						(mg/L)	(mg/L)	
	ality Control Commmission	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE	
Groundwater	Quality Standards	10	750	750	620	NL	NE	
	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	3.20.12	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0	
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	9.20.12	NS	NS	NS	NS	NS	NS	
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	12.12.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
MW-13	11.6.14	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	5.28.15	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	11.30.15	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	5.25.16 11.08.16	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	NA NA	NA NA	
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA	
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA	
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA	
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA	
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA	
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA	
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA	
	11.22.21°	NS	NS	NS	NS	NS	NS	
	4.21.11	2,800	<100	280	720	8.7	<1.0	
	6.21.11	470	<10	37	210	1.9	<1.0	
	9.22.11	540	<10	100	36	1.7	<1.0	
	12.13.11	220	<10	110	<20	1.0	<1.0	
	3.20.12	660	<5.0	240	15	2.9	<1.0	
	6.19.12	660	<5.0	300	100	3.4	<1.0	
	9.20.12*	7.3	<1.0	<1.0	<2.0	0.1	<1.0	
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	3.25.13	<1.0	<1.0	1.6	<2.0	<0.050	<1.0	
	6.27.13	34	4.4	30	130	0.56	1.4	
	10.22.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	
	12.16.13 4.18.14	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0	
	11.6.14	<1.0	<1.0	<1.0	<2.0	V0.050 NA	NA	
MW-14	5.28.15	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	11.30.15	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	11.07.16	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA	
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA	
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA	
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA	
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA	
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA	
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA	
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA	
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA	
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA	



Sample I.D.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.	Date			•		GRO	DRO
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)
New Mexico Water Quality Control Commmission						(g/	(***3:=/
	Quality Standards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
					1.0	2.12	
	4.21.11 6.21.11	4.4 <1.0	<2.0 <1.0	<2.0 <1.0	<4.0 <2.0	<0.10 <0.050	<1.0 <1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	0.065	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	0.12	<1.0
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	3.1	<1.0	2.1	14	0.19	<1.0
	3.25.13	<1.0	<1.0	<1.0	<1.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0 <2.0	<0.050	<1.0
	10.21.13 12.12.13	<1.0 1	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0 <1.0
	4.17.14	1.4	<1.0	<1.0	<2.0	<0.050	<1.0
B 40 A / 4 G	11.6.14	1.2	<1.0	<1.0	<2.0	NA	NA NA
MW-16	5.29.15	3.0	<1.0	<1.0	<2.0	NA	NA
	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.25.16	2.2	<1.0	<1.0	<2.0	NA	NA
	11.07.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.30.17	2.1	<1.0	<1.0	<1.5	NA NA	NA NA
	12.07.17 5.31.18	<1.0	<1.0 <1.0	<1.0 <1.0	<1.5	NA NA	NA NA
	11.02.18	<1.0 <1.0	<1.0	<1.0	<1.5 <1.5	NA NA	NA NA
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA <0.10	NA <1.0
	4.21.11 6.21.11	<2.0 <2.0	<2.0 <2.0	<2.0 <2.0	<4.0 <4.0	<0.10 <0.10	<1.0 <1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13 6.27.13	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.050 <0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0 <1.0
	12.12.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-17	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA
10100-17	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA NA
	11.07.16	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA
	5.26.17 12.07.17	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.5 <1.5	NA NA	NA NA
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA NA
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA NA	NA NA
	5.28.21 11.22.21	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0	NA NA	NA NA
<u> </u>	11.22.21	<b>\1.U</b>	<b>\1.0</b>	<b>\1.0</b>	<1.5	INA	INA



Sample I.D.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Cumpic ii.2.	24.0	(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
		(μg/L)	(µg/L)	(μg/L)	(µg/L)	(mg/L)	(mg/L)
						(9. =/	(g. =)
	ity Control Commmission Quality Standards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.20.12*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0
	3.25.13	NS	NS	NS	NS	NS	NS
	6.27.13	NS	NS	NS	NS	NS	NS
	10.21.13	NS	NS	NS	NS	NS	NS
	12.12.13	NS	NS	NS	NS	NS	NS
	4.17.14	NS	NS	NS	NS	NS	NS
	11.6.14	NS NC	NS	NS	NS NC	NS	NS NC
	5.29.15	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
MW-18	11.30.15 5.25.16	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
	11.07.16	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
	5.26.17	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
	12.07.17	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
	5.30.18	NS	NS	NS	NS NS	NS	NS NS
	11.01.18	NS NS	NS NS	NS	NS NS	NS	NS NS
	9.20.19	NS	NS	NS	NS	NS	NS
	1.31.20	NS	NS	NS	NS	NS	NS
	5.8.20	NS	NS	NS	NS	NS	NS
	11.11.20	NS	NS	NS	NS	NS	NS
	5.28.21	NS	NS	NS	NS	NS	NS
	11.22.21	NS	NS	NS	NS	NS	NS
	3.20.12	250	56	310	3,900	16	5.3
	6.19.12	NAPL	NAPL	NAPL	NAPL	NA	NA
	9.19.12	NAPL	NAPL	NAPL	NAPL	NA	NA
	12.17.12	180	<5.0	5.4	23	2.2	2.6
	3.25.13	160	<5.0	17	<10	1.5	1.4
	6.27.13	390	<1.0	79	66	2.7	5.9
	10.22.13	140	<1.0	<1.0	<2.0	0.51	2.1
	12.16.13	160 230	<1.0	37	12	1.4 2.2	4.2
	4.18.14 11.6.14	230	<1.0 <1.0	41 75	53 42	NA	10 NA
	5.29.15	190	<1.0	7.2	81	NA NA	NA NA
	12.1.15	210	<1.0	75	23	NA NA	NA NA
MW-19	5.26.16	260	<1.0	86	340	NA NA	NA NA
	11.08.16	270	<1.0	80	190	NA NA	NA NA
	5.30.17	270	<1.0	88	640	NA NA	NA NA
	12.07.17	180	<1.0	70	150	NA	NA NA
	5.31.18	250	<10	83	260	NA	NA
	11.02.18	230	<5.0	62	280	NA	NA
	9.25.19	340	<5.0	88	380	NA	NA
	2.4.20	100	<5.0	51	28	NA	NA
	5.11.20	97	<5.0	54	15	NA	NA
	11.12.20	240	<2.0	80	50	NA	NA
	5.28.21	120	<5.0	63	19	NA	NA
	11.22.21	160	<5.0	85	14	NA	NA



Sample I.D.	Date	Benzene (μg/L)	Toluene (μg/L)	Ethylbenzene (μg/L)	Xylenes (μg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
	New Mexico Water Quality Control Commmission Groundwater Quality Standards		750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	3.20.12	35	<1.0	1.1	3.3	0.14	<1.0
	6.19.12	3.4	<1.0	<1.0	<2.0	< 0.050	<1.0
	9.20.12*	4.7	<1.0	<1.0	<2.0	< 0.050	<1.0
	12.17.12*	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
	3.25.13*	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
	6.27.13*	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
	10.22.13*	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
	12.16.13*	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
	4.18.14*	<1.0	<1.0	<1.0	<2.0	< 0.050	<1.0
	11.6.14*	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.29.15	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-20	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA
10100-20	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.07.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.30.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.07.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.02.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA

Note: Concentrations in **bold** and yellow exceed the applicable WQCC GQS

μg/L= micrograms per liter

mg/L= milligrams per liter

NA = Not Analyzed

NS = Not Sampled NE = Not Established

NAPL = Non-aqueous phase liquid

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

A = NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to sites that predate the 2018 rule change. Therefore, this table reflects the groundwater quality standards that were applicable at the time of initial remediation.

B = This monitoring well was not sampled during this sampling event. On June 8, 2020 the New Mexico EMNRD OCD approved Enterprise's request to reduce sampling events in MW-

<sup>3,</sup> MW-11, MW-12, and MW-13 to annual events.

<sup>\* =</sup> Monitoring well purged/sampled utilizing disposable bailer during this event



Well LD	D-4-	Danish ta		DWATER ELEV		0	TOO Flooring	0
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)	THICKICSS	(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	11.80	ND	l			6289.09
	6.21.11	ND	12.16	ND				6288.73
	9.22.11	ND	12.92	ND				6287.97
	12.13.11	ND	12.45	ND	1			6288.44
	3.20.12	ND	12.13	ND	]			6288.76
	6.19.12	ND	12.76	ND				6288.13
	9.19.12	ND	13.10	ND				6287.79
	12.17.12 3.15.13	ND ND	12.33 11.88	ND ND	-			6288.56 6289.01
	6.27.13	ND	12.61	ND				6288.28
	10.22.13	ND	11.71	ND				6289.18
	12.12.13	ND	11.35	ND				6289.54
	4.18.14	ND	11.04	ND	1			6289.85
MW-1	11.6.14	ND	11.56	ND	17.71	7.71-17.71	6300.89	6289.33
	5.28.15	ND	10.86	ND	l,		2300.00	6290.03
	11.30.15	ND	10.90	ND	ĺ			6289.99
	5.25.16 11.07.16	ND ND	10.52 11.42	ND ND	ł			6290.37 6289.47
	5.26.17	ND	10.41	ND	•			6290.48
	12.06.17	ND	10.53	ND				6290.36
	5.30.18	ND	10.67	ND				6290.22
	11.01.18	ND	11.59	ND	1			6289.30
	9.20.19	ND	12.08	ND				6288.81
	1.31.20	ND	11.13	ND				6289.76
	5.8.20	ND	10.81	ND				6290.08
	11.11.20 5.28.21	ND ND	11.55 10.92	ND ND				6289.34 6289.97
	11.22.21	ND	11.69	ND				6289.20
	4.21.11	ND	10.55	ND				6289.27
	6.21.11	ND	11.87	ND	1			6287.95
	9.22.11	ND	11.86	ND				6287.96
	12.13.11	ND	11.38	ND				6288.44
	3.20.12	ND	10.95	ND				6288.87
	6.19.12	ND	11.64	ND				6288.18
	9.19.12 12.17.12	ND ND	12.10 11.23	ND ND	•			6287.72 6288.59
	3.15.13	ND	10.65	ND	1			6289.17
	6.27.13	ND	11.44	ND	1			6288.38
	10.21.13	ND	10.44	ND	]			6289.38
	12.12.13	ND	10.09	ND	]			6289.73
	4.17.14	ND	9.73	ND				6290.09
MW-2	11.6.14	ND	10.33	ND	18.45	8.45-18.45	6299.82	6289.49
	5.28.15	ND	9.61	ND	ł			6290.21 6290.15
	11.30.15 5.25.16	ND ND	9.67 9.34	ND ND	ł			6290.15
	11.07.16	ND	10.24	ND	1			6289.58
	5.26.17	ND	9.23	ND	1			6290.59
	12.06.17	ND	9.33	ND	1			6290.49
	5.30.18	ND	9.46	ND	]			6290.36
	11.01.18	ND	10.43	ND				6289.39
	9.20.19	ND	10.95	ND	1			6288.87
	1.31.20	ND	9.91	ND	-			6289.91
	5.8.20 11.11.20	ND ND	9.55 10.35	ND ND	1			6290.27 6289.47
	5.28.21	ND	9.68	ND	1			6290.14
	11.22.21	ND	10.53	ND	1			6289.29
		115	10.00	115	<u> </u>			J_00.20



Well I.D.	Date	Depth to	Depth to Water	Product	Total Depth of	Screen Interval	TOC Elevation	Groundwater
		Product	·	Thickness	Well			Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	11.30	ND				6288.92
	6.21.11	ND	11.64	ND				6288.58
	9.22.11	ND	12.45	ND				6287.77
	12.13.11 3.20.12	ND ND	11.89 11.60	ND ND				6288.33 6288.62
	6.19.12	ND	12.22	ND ND				6288.00
	9.19.12	ND	12.53	ND				6287.69
	12.17.12	ND	11.75	ND				6288.47
	3.15.13	ND	11.37	ND				6288.85
	6.27.13 10.21.13	ND ND	12.06 11.12	ND ND				6288.16 6289.10
	12.12.13	ND ND	10.84	ND ND				6289.38
	4.17.14	ND	10.55	ND				6289.67
MW-3	11.6.14	ND	11.02	ND	18.39	8.39-18.39	6300.22	6289.20
14144-0	5.28.15	ND	10.37	ND	10.00	0.00 10.00	0000.22	6289.85
	11.30.15 5.25.16	ND ND	10.40 10.10	ND ND				6289.82 6290.12
	11.07.16	ND ND	10.90	ND ND				6289.32
	5.26.17	ND	10.00	ND				6290.22
	12.06.17	ND	10.05	ND				6290.17
	5.30.18	ND	10.14	ND				6290.08
	11.01.18	ND	11.07	ND				6289.15
	9.20.19 1.31.20	ND ND	11.53 10.62	ND ND				6288.69 6289.60
	5.11.20	ND	10.31	ND				6289.91
	11.11.20	ND	11.03	ND				6289.19
	5.28.21	ND	10.42	ND				6289.80
	11.22.21	ND	11.16	ND				6289.06
	4.21.11 6.21.11	ND ND	11.90 12.18	ND ND				6289.01 6288.73
	9.22.11	ND ND	12.10	ND ND				6288.01
	12.13.11	ND	12.41	ND				6288.50
	3.20.12	ND	12.45	ND				6288.46
	6.19.12	ND	12.72	ND				6288.19
	9.19.12	ND	13.09	ND				6287.82
	12.17.12 3.15.13	ND ND	12.33 11.85	ND ND				6288.58 6289.06
	6.27.13	ND	12.60	ND				6288.31
	10.22.13	ND	11.74	ND				6289.17
	12.12.13	ND	11.37	ND				6289.54
	4.17.14	ND ND	11.05 11.58	ND ND				6289.86
MW-4	11.6.14 5.28.15	ND ND	10.91	ND ND	19.47	9.47-19.47	6300.91	6289.33 6290.00
	11.30.15	ND	10.94	ND				6289.97
	5.25.16	ND	10.59	ND				6290.32
	11.07.16	ND	11.43	ND				6289.48
	5.26.17	ND ND	10.47	ND ND				6290.44
	12.06.17 5.30.18	ND ND	10.60 10.69	ND ND				6290.31 6290.22
	11.01.18	ND ND	11.58	ND ND				6289.33
	9.20.19	ND	12.04	ND	1			6288.87
	1.31.20	ND	11.14	ND				6289.77
	5.8.20	ND	10.83	ND				6290.08
	11.11.20	ND	11.54	ND				6289.37
	5.28.21 11.22.21	ND ND	10.98 11.66	ND ND				6289.93 6289.25
	11.22.21		11.00	1,10				0200.20



Well I.D. Date		Depth to	Depth to Water Product		Total Depth of	Screen Interval	TOC Elevation	Groundwater
		Product		Thickness	Well			Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	11.98	ND				6289.21
	6.21.11	ND	12.40	ND				6288.79
	9.22.11	ND	13.07	ND				6288.12
	12.13.11 3.20.12	ND ND	12.55 12.26	ND ND				6288.64 6288.93
	6.19.12	ND	12.93	ND ND				6288.26
	9.19.12	ND	13.27	ND				6287.92
	12.17.12	ND	12.51	ND				6288.68
	3.15.13	ND	12.05	ND				6289.14
	6.27.13 10.21.13	ND ND	12.82 11.94	ND ND				6288.37 6289.25
	12.12.13	ND ND	11.61	ND ND				6289.58
	4.17.14	ND	11.25	ND				6289.94
MW-11	11.6.14	ND	11.80	ND	19.07	9.07-19.07	6301.19	6289.39
14144-11	5.28.15	ND	11.12	ND	10.07	0.07 10.07	0001.10	6290.07
	11.30.15 5.25.16	ND ND	11.18 10.79	ND ND				6290.01 6290.40
	11.07.16	ND	11.66	ND ND				6289.53
	5.26.17	ND	10.66	ND				6290.53
	12.06.17	ND	10.82	ND				6290.37
	5.30.18	ND	10.88	ND				6290.31
	11.01.18 9.20.19	ND ND	11.82 12.26	ND ND				6289.37 6288.93
	1.31.20	ND ND	11.39	ND ND				6289.80
	5.8.20	ND	11.07	ND				6290.12
	11.11.20	ND	11.79	ND				6289.40
	5.28.21	ND	11.24	ND				6289.95
	11.22.21	ND	11.92	ND				6289.27
	4.21.11 6.21.11	ND ND	8.96 9.42	ND ND				6290.12 6289.66
	9.22.11	ND	10.82	ND				6288.26
	12.13.11	ND	10.13	ND				6288.95
	3.20.12	ND	9.41	ND				6289.67
	6.19.12	ND	10.09	ND				6288.99
	9.19.12	ND	11.03 10.21	ND ND				6288.05 6288.87
	12.17.12 3.15.13	ND ND	9.26	ND ND	1			6289.82
	6.27.13	ND	9.99	ND				6289.09
	10.21.13	ND	9.09	ND				6289.99
	12.12.13	ND	8.78	ND				6290.30
	4.17.14 11.6.14	ND ND	8.44 9.05	ND ND	1			6290.64 6290.03
MW-12	5.28.15	ND ND	8.34	ND ND	18.03	8.03-18.03	6299.08	6290.74
	11.30.15	ND	8.44	ND				6290.64
	5.25.16	ND	8.11	ND				6290.97
	11.07.16	ND	8.87	ND				6290.21
	5.26.17 12.06.17	ND ND	8.01 8.12	ND ND				6291.07 6290.96
	5.30.18	ND ND	8.12 8.27	ND ND	1			6290.96
	11.01.18	ND	9.17	ND				6289.91
	9.20.19	ND	9.68	ND				6289.40
	1.31.20	ND	8.71	ND				6290.37
	5.8.20	ND	8.34	ND				6290.74
	11.11.20 5.28.21	ND ND	9.10 8.48	ND ND	1			6289.98 6290.60
	11.22.21	ND ND	9.30	ND ND				6289.78
	11.22.21	110	0.00	שויו	I			0200.10



Well I.D.			Total Depth of	Screen Interval	TOC Elevation	Groundwater		
		Product	(foot BTOC)	Thickness	Well	(foot BTOC)	OC) (feet AMSL)	Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)		(feet AMSL)
	4.21.11	ND	9.07	ND				6289.20
	6.21.11	ND	9.51	ND				6288.76
	9.22.11 12.13.11	ND ND	10.15 9.59	ND ND				6288.12 6288.68
	3.20.12	ND	9.35	ND				6288.92
	6.19.12	ND	10.09	ND				6288.18
	9.19.12	ND	10.29	ND				6287.98
	12.17.12 3.15.13	ND ND	9.47 9.11	ND ND				6288.80 6289.16
	6.27.13	ND	9.11	ND ND				6288.33
	10.21.13	ND	8.91	ND				6289.36
	12.12.13	ND	8.57	ND				6289.70
	4.17.14	ND	8.39	ND				6289.88
MW-13	11.6.14 5.28.15	ND ND	8.83 8.32	ND ND	17.90	7.90-17.90	6298.27	6289.44 6289.95
	11.30.15	ND	8.21	ND ND				6290.06
	5.25.16	ND	8.01	ND				6290.26
	11.07.16	ND	8.67	ND				6289.60
	5.26.17	ND	7.83	ND				6290.44
	12.06.17 5.30.18	ND ND	7.90 8.08	ND ND				6290.37 6290.19
	11.01.18	ND	8.84	ND				6289.43
	9.20.19	ND	9.36	ND				6288.91
	1.31.20	ND	8.40	ND				6289.87
	5.11.20	ND	8.17	ND				6290.10
	11.11.20 5.28.21	ND ND	8.82 8.29	ND ND				6289.45 6289.98
	11.22.21	ND	8.93	ND				6289.34
	4.21.11	ND	12.54	ND				6288.66
	6.21.11	ND	12.88	ND				6288.32
	9.22.11 12.13.11	ND ND	13.53 13.11	ND ND				6287.67 6288.09
	3.20.12	ND	12.80	ND ND				6288.40
	6.19.12	ND	13.42	ND				6287.78
	9.19.12	ND	13.70	ND				6287.50
	12.17.12	ND	12.93	ND				6288.27
	3.15.13 6.27.13	ND ND	12.55 13.26	ND ND				6288.65 6287.94
	10.22.13	ND	12.39	ND				6288.81
	12.12.13	ND	12.06	ND				6289.14
	4.18.14	ND	11.79	ND				6289.41
MW-14	11.6.14	ND	12.23	ND	18.88	8.88-18.88	6301.20	6288.97
	5.28.15 11.30.15	ND ND	11.67 11.62	ND ND				6289.53 6289.58
	5.25.16	ND	11.35	ND				6289.85
	11.07.16	ND	12.09	ND				6289.11
	5.26.17	ND	11.24	ND				6289.96
	12.06.17	ND	11.27	ND				6289.93
	5.30.18 11.01.18	ND ND	11.36 12.23	ND ND				6289.84 6288.97
	9.20.19	ND ND	12.68	ND ND				6288.52
	1.31.20	ND	11.78	ND				6289.42
	5.11.20	ND	11.54	ND				6289.66
	11.11.20	ND	12.19	ND				6289.01
	5.28.21 11.22.21	ND ND	11.65 12.29	ND ND				6289.55 6288.91
	11.22.21	טאו	14.43	טאו				UZ00.91



Well I.D.	Date	· · · · · · · · · · · · · · · · · · ·		Total Depth of	Screen Interval	TOC Elevation	Groundwater	
		Product (feet BTOC)	(feet BTOC)	Thickness	Well (feet BTOC)	(feet BTOC)	(feet AMSL)	Elevation* (feet AMSL)
		(10012100)	(1000 2 1 0 0)		(10012100)	(1000 21 0 0)	(1000702)	(
	4.21.11	ND	12.06	ND				6287.83
	6.21.11	ND	12.26	ND				6287.63
	9.22.11	ND	12.57	ND				6287.32
	12.13.11	ND	12.28	ND				6287.61
	3.20.12	ND	12.24	ND				6287.65
	6.19.12 9.19.12	ND ND	12.71 12.80	ND ND				6287.18 6287.09
	12.17.12	ND	11.90	ND				6287.99
	3.15.13	ND	11.80	ND				6288.09
	6.27.13	ND	12.37	ND				6287.52
	10.21.13	ND	11.32	ND				6288.57
	12.12.13	ND ND	10.92 10.76	ND ND				6288.97 6289.13
	4.17.14 11.6.14	ND	10.76	ND ND				6288.90
MW-16	5.28.15	ND	10.56	ND	18.01	8.01-18.01	6299.89	6289.33
	11.30.15	ND	10.39	ND				6289.50
	5.25.16	ND	10.10	ND				6289.79
	11.07.16 5.26.17	ND ND	10.86 10.02	ND ND				6289.03 6289.87
	12.06.17	ND ND	10.02	ND ND				6289.88
	5.30.18	ND	10.11	ND				6289.78
	11.01.18	ND	11.02	ND				6288.87
	9.20.19	ND	11.35	ND				6288.54
	1.31.20	ND	10.60	ND				6289.29
	5.11.20 11.11.20	ND ND	10.32 10.96	ND ND				6289.57 6288.93
	5.28.21	ND	10.36	ND				6289.53
	11.22.21 <sup>A</sup>	ND	11.57	ND				6288.32
	4.21.11	ND	9.90	ND				6288.67
	6.21.11	ND	9.56	ND				6289.01
	9.22.11 12.13.11	ND ND	10.83 10.31	ND ND				6287.74 6288.26
	3.20.12	ND	10.12	ND				6288.45
	6.19.12	ND	10.81	ND				6287.76
	9.19.12	ND	10.95	ND				6287.62
	12.17.12	ND	10.13	ND				6288.44
	3.15.13 6.27.13	ND ND	9.85 10.62	ND ND				6288.72 6287.95
	10.21.13	ND	9.61	ND				6288.96
	12.12.13	ND	9.28	ND				6289.29
	4.17.14	ND	9.13	ND				6289.44
MW-17	11.6.14	ND ND	9.47	ND ND	18.16	8.16-18.16	6298.57	6289.10
	5.28.15 11.30.15	ND ND	9.00 8.87	ND ND				6289.57 6289.70
	5.25.16	ND ND	8.65	ND ND				6289.92
	11.07.16	ND	9.32	ND				6289.25
	5.26.17	ND	8.56	ND				6290.01
	12.06.17	ND	8.52	ND				6290.05
	5.30.18 11.01.18	ND ND	8.68 9.48	ND ND				6289.89 6289.09
	9.20.19	ND ND	9.48	ND ND				6288.60
	1.31.20	ND	9.05	ND				6289.52
	5.11.20	ND	8.83	ND				6289.74
	11.11.20	ND	9.45	ND				6289.12
	5.28.21	ND ND	8.91	ND ND				6289.66
	11.22.21	ND	9.56	ND			<u> </u>	6289.01



				Product				
Well I.D.	Date	Depth to	Product Thi		Total Depth of	Screen Interval	TOC Elevation	Groundwater
		(feet BTOC)	(feet BTOC)	Thickness	Well (feet BTOC)	(feet BTOC)	(foot AMCL)	Elevation*
		(leet BTOC)	(leet BTOC)		(leet BTOC)	(leet BTOC)	(feet AMSL)	(feet AMSL)
	3.20.12	ND	16.60	ND				6288.17
	6.19.12	ND	17.42	ND				6287.35
	9.19.12	ND	17.45	ND				6287.32
	12.17.12	ND	16.73	ND				6288.04
	3.15.13		Blockage					Blockage
	6.27.13		Blockage					Blockage
	10.22.13		Blockage					Blockage
	12.12.13		Blockage					Blockage
	4.17.14		Blockage					Blockage
	11.6.14		Blockage					Blockage
	5.28.15		Blockage					Blockage
MW-18	11.30.15 5.25.16		Blockage Blockage		NA	NA	6304.77	Blockage Blockage
	11.07.16		Blockage					Blockage
	5.26.17	ND	15.12	ND				6289.65
	12.06.17	ND	15.31	ND				6289.46
	5.30.18		Blockage					Blockage
	11.01.18	Blockage						Blockage
	9.20.19	Blockage						Blockage
	1.31.20	Blockage						Blockage
	5.8.20	Blockage						Blockage
	11.11.20	Blockage						Blockage
	5.28.21		Blockage					Blockage
	11.22.21	ND	Blockage	ND				Blockage
	3.20.12 6.19.12 <sup>B</sup>	ND 10.05	15.69	ND				6288.11
		16.25	16.32	0.07				6287.52
	9.19.12 <sup>B</sup>	16.47	16.49	0.02				6287.32
	12.17.12 3.15.13	ND ND	15.91 15.38	ND ND				6287.89 6288.42
	6.27.13	ND ND	16.19	ND ND				6287.61
	10.22.13	ND ND	15.13	ND ND				6288.67
	12.12.13	ND	14.78	ND				6289.02
	4.18.14	ND	14.68	ND				6289.12
	11.6.14	ND	14.99	ND				6288.81
	5.28.15	ND	14.60	ND				6289.20
MW-19	11.30.15	ND	14.38	ND	23.22	13.22-23.22	6303.80	6289.42
	5.25.16	ND	14.28	ND			5555.55	6289.52
	11.07.16	ND	14.83	ND				6288.97
	5.26.17	ND	14.20	ND				6289.60
	12.06.17	ND	14.08	ND				6289.72
	5.30.18	ND	14.27	ND ND				6289.53
	11.01.18	ND ND	15.00 15.47	ND ND				6288.80
	9.20.19 1.31.20	ND ND	14.56	ND ND				6288.33 6289.24
	5.11.20	ND ND	14.40	ND ND				6289.40
	11.11.20	ND	14.98	ND				6288.82
	5.28.21	ND	14.53	ND				6289.27
	11.22.21	ND	15.05	ND				6288.75



Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	3.20.12	ND	25.82	ND				6286.77
	6.19.12	ND	26.30	ND				6286.29
	9.19.12	ND	26.31	ND				6286.28
	12.17.12	ND	25.42	ND				6287.17
	3.15.13	ND	25.38	ND		20.51-30.51		6287.21
	6.27.13	ND	26.11	ND				6286.48
	10.22.13	ND	24.98	ND				6287.61
	12.12.13	ND	24.57	ND	30.51			6288.02
	4.17.14	ND	24.66	ND				6287.93
	11.6.14	ND	24.81	ND				6287.78
	5.28.15	ND	24.80	ND			6312.59	6287.79
MW-20	11.30.15	ND	24.15	ND				6288.44
20	5.25.16	ND	24.28	ND				6288.31
	11.07.16	ND	24.48	ND				6288.11
	5.26.17	ND	24.37	ND				6288.22
	12.06.17	ND	23.95	ND				6288.64
	5.30.18	ND	24.29	ND				6288.30
	11.01.18	ND	24.69	ND				6287.90
	9.20.19	ND	25.35	ND				6287.24
	1.31.20	ND	24.26	ND				6288.33
	5.11.20	ND	24.30	ND				6288.29
	11.11.20	ND	24.73	ND				6287.86
	5.28.21	ND	24.43	ND				6288.16
	11.22.21	ND	24.70	ND				6287.89

BTOC - below top of casing

TOC - top of casing

Basis of elevation: As measured at set temporary bench mark (elevation = 6296.14'), as indicated by the professional surveyor.

NA - Not Available

ND - Not Detected

<sup>\* -</sup> corrected for presence of phase-sepated hydrocarbon using a site-specific density correction factor of 0.63. Groundwater elevations at each well are listed in feet above mean sea level (AMSL) as measured from the TOC.

<sup>&</sup>lt;sup>A</sup> - Suspected misgauge.

<sup>&</sup>lt;sup>B</sup> - No visual verification. May not be hydrocarbon.

### **ENSOLUM**

**APPENDIX C** 

Laboratory Data Sheets & Chain of Custody Documentation



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

June 07, 2021

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603

FAX:

RE: Lateral K-51 2010 OrderNo.: 2106007

### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 12 sample(s) on 5/29/2021 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

andy

4901 Hawkins NE

Albuquerque, NM 87109

### **Analytical Report**

Lab Order **2106007**Date Reported: **6/7/2021** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-11

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 9:40:00 AM

 Lab ID:
 2106007-001
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/2/2021 7:02:00 PM	R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 7:02:00 PM	R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 7:02:00 PM	R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 7:02:00 PM	R78810
Surr: 4-Bromofluorobenzene	83.2	70-130	%Rec	1	6/2/2021 7:02:00 PM	R78810

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

- 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 14

Lab Order **2106007** 

Date Reported: 6/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-4

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 10:20:00 AM

 Lab ID:
 2106007-002
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/2/2021 7:22:00 PM	R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 7:22:00 PM	R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 7:22:00 PM	R78810
Xylenes, Total	2.9	2.0	μg/L	1	6/2/2021 7:22:00 PM	R78810
Surr: 4-Bromofluorobenzene	86.8	70-130	%Rec	1	6/2/2021 7:22:00 PM	R78810

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

- 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 14

Lab Order 2106007

Date Reported: 6/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-12

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 10:50:00 AM

 Lab ID:
 2106007-003
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/2/2021 7:41:00 PM	R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 7:41:00 PM	R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 7:41:00 PM	R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 7:41:00 PM	R78810
Surr: 4-Bromofluorobenzene	82.9	70-130	%Rec	1	6/2/2021 7:41:00 PM	R78810

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 14

Lab Order 2106007

Date Reported: 6/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-1

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 11:25:00 AM

 Lab ID:
 2106007-004
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 1.0 μg/L 6/2/2021 8:01:00 PM R78810 Toluene ND 1.0 μg/L 1 6/2/2021 8:01:00 PM R78810 Ethylbenzene ND 1.0 μg/L 6/2/2021 8:01:00 PM R78810 Xylenes, Total ND 2.0 μg/L 6/2/2021 8:01:00 PM R78810 Surr: 4-Bromofluorobenzene 85.6 70-130 %Rec 6/2/2021 8:01:00 PM R78810

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 14

Lab Order **2106007**Date Reported: **6/7/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-2

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 12:00:00 PM

 Lab ID:
 2106007-005
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/2/2021 8:21:00 PM	R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 8:21:00 PM	R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 8:21:00 PM	R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 8:21:00 PM	R78810
Surr: 4-Bromofluorobenzene	86.3	70-130	%Rec	1	6/2/2021 8:21:00 PM	R78810

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 5 of 14

Lab Order **2106007**Date Reported: **6/7/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-13

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 12:30:00 PM

 Lab ID:
 2106007-006
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/2/2021 8:41:00 PM	R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 8:41:00 PM	R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 8:41:00 PM	R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 8:41:00 PM	R78810
Surr: 4-Bromofluorobenzene	88.8	70-130	%Rec	1	6/2/2021 8:41:00 PM	R78810

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 6 of 14

**CLIENT: ENSOLUM** 

## **Analytical Report**

Lab Order **2106007**Date Reported: **6/7/2021** 

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-17

**Project:** Lateral K-51 2010 **Collection Date:** 5/28/2021 1:05:00 PM

**Lab ID:** 2106007-007 **Matrix:** AQUEOUS **Received Date:** 5/29/2021 8:35:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/2/2021 9:01:00 PM	R78810
Toluene	ND	1.0	μg/L	1	6/2/2021 9:01:00 PM	R78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 9:01:00 PM	R78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 9:01:00 PM	R78810
Surr: 4-Bromofluorobenzene	85.6	70-130	%Rec	1	6/2/2021 9:01:00 PM	R78810

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 7 of 14

Lab Order **2106007**Date Reported: **6/7/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-3

**Project:** Lateral K-51 2010 **Collection Date:** 5/28/2021 1:35:00 PM

**Lab ID:** 2106007-008 **Matrix:** AQUEOUS **Received Date:** 5/29/2021 8:35:00 AM

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/2/2021 11:00:00 PM	B78810
Toluene	ND	1.0	μg/L	1	6/2/2021 11:00:00 PM	B78810
Ethylbenzene	ND	1.0	μg/L	1	6/2/2021 11:00:00 PM	B78810
Xylenes, Total	ND	2.0	μg/L	1	6/2/2021 11:00:00 PM	B78810
Surr: 4-Bromofluorobenzene	84.5	70-130	%Rec	1	6/2/2021 11:00:00 PM	B78810

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 8 of 14

Lab Order **2106007**Date Reported: **6/7/2021** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-16

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 2:05:00 PM

 Lab ID:
 2106007-009
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 1.0 μg/L 6/3/2021 B78810 Toluene ND 1.0 μg/L 1 6/3/2021 B78810 Ethylbenzene ND B78810 1.0 μg/L 6/3/2021 Xylenes, Total ND 2.0 μg/L 6/3/2021 B78810 B78810 Surr: 4-Bromofluorobenzene 85.7 70-130 %Rec 6/3/2021

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 9 of 14

Lab Order **2106007** 

Date Reported: 6/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-14

 Project:
 Lateral K-51 2010
 Collection Date: 5/28/2021 2:35:00 PM

 Lab ID:
 2106007-010
 Matrix: AQUEOUS
 Received Date: 5/29/2021 8:35:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 1.0 μg/L 6/3/2021 12:20:00 AM B78810 Toluene ND 1.0 μg/L 6/3/2021 12:20:00 AM B78810 1 Ethylbenzene ND 1.0 μg/L 6/3/2021 12:20:00 AM B78810 Xylenes, Total ND 2.0 μg/L 6/3/2021 12:20:00 AM B78810 Surr: 4-Bromofluorobenzene 87.4 70-130 %Rec 6/3/2021 12:20:00 AM B78810

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

- 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 10 of 14

**CLIENT: ENSOLUM** 

### **Analytical Report**

Lab Order **2106007**Date Reported: **6/7/2021** 

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-20

**Project:** Lateral K-51 2010 **Collection Date:** 5/28/2021 3:10:00 PM

**Lab ID:** 2106007-011 **Matrix:** AQUEOUS **Received Date:** 5/29/2021 8:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	1.0	μg/L	1	6/3/2021 12:40:00 AM	B78810
Toluene	ND	1.0	μg/L	1	6/3/2021 12:40:00 AM	B78810
Ethylbenzene	ND	1.0	μg/L	1	6/3/2021 12:40:00 AM	B78810
Xylenes, Total	ND	2.0	μg/L	1	6/3/2021 12:40:00 AM	B78810
Surr: 4-Bromofluorobenzene	89.1	70-130	%Rec	1	6/3/2021 12:40:00 AM	B78810

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 11 of 14

**CLIENT: ENSOLUM** 

### **Analytical Report**

Lab Order **2106007**Date Reported: **6/7/2021** 

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-19

**Project:** Lateral K-51 2010 **Collection Date:** 5/28/2021 3:35:00 PM

**Lab ID:** 2106007-012 **Matrix:** AQUEOUS **Received Date:** 5/29/2021 8:35:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	120	5.0	μg/L	5	6/3/2021 1:00:00 AM	B78810
Toluene	ND	5.0	μg/L	5	6/3/2021 1:00:00 AM	B78810
Ethylbenzene	63	5.0	μg/L	5	6/3/2021 1:00:00 AM	B78810
Xylenes, Total	19	10	μg/L	5	6/3/2021 1:00:00 AM	B78810
Surr: 4-Bromofluorobenzene	112	70-130	%Rec	5	6/3/2021 1:00:00 AM	B78810

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

- 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 12 of 14

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2106007** *07-Jun-21* 

Client: ENSOLUM
Project: Lateral K-51 2010

Sample ID: 100ng BTEX Ics	SampType: LCS TestCode: EPA Method 80						8021B: Volati	les		
Client ID: LCSW	Batch	1D: <b>R7</b>	8810	RunNo: <b>78810</b>						
Prep Date:	Analysis D	ate: <b>6/</b> 2	2/2021	SeqNo: <b>2763901</b> Units: μg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.4	80	120			
Toluene	18	1.0	20.00	0	90.6	80	120			
Ethylbenzene	19	1.0	20.00	0	93.8	80	120			
Xylenes, Total	55	2.0	60.00	0	92.1	80	120			
Surr: 4-Bromofluorobenzene	17		20.00		85.0	70	130			

Sample ID: MB	SampT	SampType: MBLK TestCode: EPA Method 8						iles		
Client ID: PBW	Batch	ID: <b>R7</b>	8810	R	RunNo: <b>78810</b>					
Prep Date:	Analysis Da	ate: <b>6/2/2021</b> SeqNo: <b>27</b>				lo: <b>2763902</b> 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	17		20.00		84.1	70	130			

Sample ID: 100ng BTEX Ics2	SampT	SampType: LCS TestCode: EPA Method 80								
Client ID: LCSW	Batch	n ID: <b>B7</b>	8810	F	RunNo: <b>7</b> 8	8810				
Prep Date:	Analysis D	oate: 6/	2/2021	S	SeqNo: 2764368			B 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	80	120			
Toluene	18	1.0	20.00	0	90.2	80	120			
Ethylbenzene	19	1.0	20.00	0	93.1	80	120			
Xylenes, Total	55	2.0	60.00	0	91.1	80	120			
Surr: 4-Bromofluorobenzene	17		20.00		83.6	70	130			

Sample ID: MB2	SampType: MBLK TestCode:				tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBW	Batch ID: <b>B78810</b>			RunNo: <b>78810</b>						
Prep Date:	Analysis D	Date: 6/2/2021			SeqNo: 2764369			9 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	17		20.00		83.9	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

- 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 13 of 14

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2106007** *07-Jun-21* 

Client: ENSOLUM
Project: Lateral K-51 2010

Sample ID: 2106007-008ams	SampT	уре: МS	5	TestCode: EPA Method 8021B: Volatiles								
Client ID: MW-3	Batch	Batch ID: <b>B78810</b> RunNo: <b>78810</b>										
Prep Date:	Analysis D	oate: <b>6/</b> 2	2/2021	8	SeqNo: 2	764371	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	18	1.0	20.00	0	88.9	80	120					
Toluene	18	1.0	20.00	0	90.6	80	120					
Ethylbenzene	19	1.0	20.00	0	93.4	80	120					
Xylenes, Total	55	2.0	60.00	0	91.4	80	120					
Surr: 4-Bromofluorobenzene	16		20.00		81.7	70	130					

Sample ID: 2106007-008ams	sampT	Гуре: М\$	SD	Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID: MW-3	Batcl	h ID: <b>B7</b>								
Prep Date:	Analysis D	Date: 6/	2/2021	\$	SeqNo: 2	764372	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	86.2	80	120	2.98	20	
Toluene	18	1.0	20.00	0	87.5	80	120	3.38	20	
Ethylbenzene	18	1.0	20.00	0	90.1	80	120	3.63	20	
Xylenes, Total	53	2.0	60.00	0	88.5	80	120	3.14	20	
Surr: 4-Bromofluorobenzene	16		20.00		80.0	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

- 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 14 of 14



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

# Sample Log-In Check List

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

Client Name: ENSOLUM	Work Order Numb	er: 2106007		RcptNo:	1
Received By: Sean Livingston	5/29/2021 8:35:00 A	M	Sali	got-	
Completed By: Cheyenne Cason	6/1/2021 8:12:56 AM	1	S.L.		
Reviewed By: DAD 6.1.21			ov.		
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
<u>Log In</u>					
3. Was an attempt made to cool the samples	?	Yes 🗸	No 🗌	NA 🗌	
4. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated test(	(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) prope		Yes 🗸	No 🗌		
8. Was preservative added to bottles?		Yes	No 🗸	NA 🗆	
9. Received at least 1 vial with headspace <1/	'4" for AQ VOA?	Yes 🗸	No 🗌	NA 🗌	
10. Were any sample containers received brok	en?	Yes	No 🗸		
		_		# of preserved bottles checked	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗸	No 🔲	for pH: (<2 or ≥	12 unless noted)
12. Are matrices correctly identified on Chain of	f Custody?	Yes 🗸	No 🗆	Adjusted?	12 diliess floted)
13. Is it clear what analyses were requested?		Yes 🗸	No 🗆		
14. Were all holding times able to be met?		Yes 🗸	No 🗌	Checked by:	PA 6.1.2
(If no, notify customer for authorization.)					
Special Handling (if applicable)  15. Was client notified of all discrepancies with	this order?	Yes	No 🗌	NA 🗹	
f	MAN MAINTANNAM CARRIE	Tes 🗀	INO [_]	NA 💌	
Person Notified:	Date:				
By Whom:	Via:	eMail	Phone Fax	In Person	
Regarding: Client Instructions:			discontinuis de la constitución de		
16. Additional remarks:					
	Seal Intact Seal No	Seal Date	Signed By		

Receiv	ed by	00	(D: 7/	3/20	24 <i>1</i>	2:33	3:21	PM						П		Г			Г				Γ			Г	-Pa	ge 5	1 of 2
	HALL ENVIRONMENTAL	SINE SECTION OF SECTIO	www.nanenbironmentar.com 4901 Hawkins NE - Albuquerque, NM 87109		Analysis		S 'Þ	NS0	(1. )728 , <sub>s</sub> OI	100 to 10	10 103 103	etho y 83 Me r, <i>h</i> (AO)	EDB (M PAHs by CI, F, B 8260 (V 8270 (S Total Co														+	Sil to Ensolum	1847 May Desten Sar Courar 5/20/21 8:35
			4901	Tel. 5		(0							.08:H9T 59 1808													Remarks:			
				т —		(1	305	) s,	BW.	1	38	ΤM	NEX /	$\rightarrow$	$\times$	$\times$	X	X	$\times$	X	×	X	X	X	X	Rem			
100			51 (2010)		0	> 4 4 40 F. S	0		/	No D		(0°) 8-1-0	HEAL No.	(00)	002	003	6004	500	900	CD7	008	CHO 0009	010	011	210	-		Date Time	5(20/121 8:25
Time:	l □ Rush		- Y Ibs		A12260	ager: //	7	d	Libaniel	□ √Yes □	1520000	(including CF): 1-8 ±	Preservative 7	- Holls.	- Hall.	+ Aall	+ Kali	4.00	+ H2C1"	1 Ch	. ItaCly	Hall	- HECLY	Mally.	- HEOLY	Via:	5	Via:	(Januar 5)
Turn-Around Time:	   ⊠ Standard	Project Name:	Late	Project #:	651	Project Manage	,		Sampler:	On Ice:	# of Coolers:	Cooler Temp(including CF):	Container Type and #	ST	3x Yanluch	3x Yandlo	3x y and Was	3x4cm/log	2x 40ml/10A	2x4CmUDA	3x YouLVOR	3x CoullDA	3x40mLVOA	3x40ml DA	3x4cm(1DF	Received by:	Jan.	Received by:	7 Jac
Chain-of-Custody Record	77		. RioGrande, SuiteA	410		sumersa ensolun.com		☐ Level 4 (Full Validation)	npliance				Sample Name	WW-II	MW-4	MW-12	MW-I	MW-2	MW-13	MW-17	MW-3	MW-16	MW-14	MW-20	MW-19	d by:		d-by:	at ( ) coten
no-Jo-	am/ ce	_	s: 606 S.		171	0			☐ Az Compliance	□ Other			Matrix	3	3	3	3	3	3	3	3	3	3	3	1	Relinquished by:	1	Relinguished by:	More
hain	Enso		Addres	C, 7	,	Fax#:	ackage	lard	ation:	C	EDD (Type)		Time	24:45	10:20	10:52	1525	12:00	12.3	13.0	13:30	14:09	14:35	15:10	15:35	Time:	13	Time:	1847
Chain-o	Client:	Ima	Mailing /	Aztec	202/2 Phone #:	email or Fax#:	2.1 QA/QC Package:	☐ Standard	Accreditation:		$\Box$ EDD		Date -	Shely	Sien	Sooth	Stehl	Spetu	2/2/21/2	Spelu	5/28/4	Stroke	500/21	Sheld	72	Date: T	7		128/21



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

December 07, 2021

Kyle Summers Ensolum 606 S Rio Grande Ste A Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Lateral K 51 2010 OrderNo.: 2111B24

### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/23/2021 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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

Indest

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-4

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 10:15:00 AM

 Lab ID:
 2111B24-001
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: <b>JR</b>
Benzene	ND	1.0	μg/L	1	11/30/2021 2:22:05 PM	R83191
Toluene	ND	1.0	μg/L	1	11/30/2021 2:22:05 PM	R83191
Ethylbenzene	ND	1.0	μg/L	1	11/30/2021 2:22:05 PM	/ R83191
Xylenes, Total	ND	1.5	μg/L	1	11/30/2021 2:22:05 PM	/ R83191
Surr: 1,2-Dichloroethane-d4	99.8	70-130	%Rec	1	11/30/2021 2:22:05 PM	/ R83191
Surr: Dibromofluoromethane	93.4	70-130	%Rec	1	11/30/2021 2:22:05 PM	/ R83191
Surr: Toluene-d8	98.3	70-130	%Rec	1	11/30/2021 2:22:05 PM	1 R83191

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
- 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 1 of 9

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-1

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 10:50:00 AM

 Lab ID:
 2111B24-002
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: <b>JR</b>
Benzene	ND	1.0	μg/L	1	11/30/2021 2:50:39 PM	1 R83191
Toluene	ND	1.0	μg/L	1	11/30/2021 2:50:39 PM	1 R83191
Ethylbenzene	ND	1.0	μg/L	1	11/30/2021 2:50:39 PM	1 R83191
Xylenes, Total	ND	1.5	μg/L	1	11/30/2021 2:50:39 PM	1 R83191
Surr: 1,2-Dichloroethane-d4	99.3	70-130	%Rec	1	11/30/2021 2:50:39 PM	1 R83191
Surr: Dibromofluoromethane	95.5	70-130	%Rec	1	11/30/2021 2:50:39 PM	1 R83191
Surr: Toluene-d8	99.1	70-130	%Rec	1	11/30/2021 2:50:39 PM	1 R83191

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

Page 2 of 9

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-2

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 11:20:00 AM

 Lab ID:
 2111B24-003
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: <b>JR</b>
Benzene	ND	1.0	μg/L	1	11/30/2021 3:19:14 PM	/ R83191
Toluene	ND	1.0	μg/L	1	11/30/2021 3:19:14 PN	/ R83191
Ethylbenzene	ND	1.0	μg/L	1	11/30/2021 3:19:14 PN	/ R83191
Xylenes, Total	ND	1.5	μg/L	1	11/30/2021 3:19:14 PN	/ R83191
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	11/30/2021 3:19:14 PN	/ R83191
Surr: Dibromofluoromethane	99.7	70-130	%Rec	1	11/30/2021 3:19:14 PN	/ R83191
Surr: Toluene-d8	99.1	70-130	%Rec	1	11/30/2021 3:19:14 PN	1 R83191

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
- 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 3 of 9

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-17

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 11:45:00 AM

 Lab ID:
 2111B24-004
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: JR
Benzene	ND	1.0	μg/L	1	11/30/2021 3:47:51 PM	1 R83191
Toluene	ND	1.0	μg/L	1	11/30/2021 3:47:51 PM	1 R83191
Ethylbenzene	ND	1.0	μg/L	1	11/30/2021 3:47:51 PM	1 R83191
Xylenes, Total	ND	1.5	μg/L	1	11/30/2021 3:47:51 PM	1 R83191
Surr: 1,2-Dichloroethane-d4	99.9	70-130	%Rec	1	11/30/2021 3:47:51 PM	1 R83191
Surr: Dibromofluoromethane	97.1	70-130	%Rec	1	11/30/2021 3:47:51 PM	1 R83191
Surr: Toluene-d8	100	70-130	%Rec	1	11/30/2021 3:47:51 PM	1 R83191

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
- 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 4 of 9

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-16

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 12:05:00 PM

 Lab ID:
 2111B24-005
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	:: JR
Benzene	ND	1.0	μg/L	1	11/30/2021 4:16:37 PM	R83191
Toluene	ND	1.0	μg/L	1	11/30/2021 4:16:37 PM	R83191
Ethylbenzene	ND	1.0	μg/L	1	11/30/2021 4:16:37 PM	R83191
Xylenes, Total	ND	1.5	μg/L	1	11/30/2021 4:16:37 PM	R83191
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	11/30/2021 4:16:37 PM	R83191
Surr: Dibromofluoromethane	99.2	70-130	%Rec	1	11/30/2021 4:16:37 PM	R83191
Surr: Toluene-d8	97.3	70-130	%Rec	1	11/30/2021 4:16:37 PM	R83191

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

Page 5 of 9

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-14

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 12:35:00 PM

 Lab ID:
 2111B24-006
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: <b>JR</b>
Benzene	ND	1.0	μg/L	1	11/30/2021 4:45:18 PM	/ R83191
Toluene	ND	1.0	μg/L	1	11/30/2021 4:45:18 PN	/ R83191
Ethylbenzene	ND	1.0	μg/L	1	11/30/2021 4:45:18 PN	1 R83191
Xylenes, Total	ND	1.5	μg/L	1	11/30/2021 4:45:18 PN	/ R83191
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	11/30/2021 4:45:18 PN	/ R83191
Surr: Dibromofluoromethane	98.7	70-130	%Rec	1	11/30/2021 4:45:18 PN	/ R83191
Surr: Toluene-d8	97.6	70-130	%Rec	1	11/30/2021 4:45:18 PN	1 R83191

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
- 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 6 of 9

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-20

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 1:05:00 PM

 Lab ID:
 2111B24-007
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: JR
Benzene	ND	1.0	μg/L	1	11/30/2021 5:13:48 PM	1 R83191
Toluene	ND	1.0	μg/L	1	11/30/2021 5:13:48 PM	1 R83191
Ethylbenzene	ND	1.0	μg/L	1	11/30/2021 5:13:48 PM	1 R83191
Xylenes, Total	ND	1.5	μg/L	1	11/30/2021 5:13:48 PM	1 R83191
Surr: 1,2-Dichloroethane-d4	98.8	70-130	%Rec	1	11/30/2021 5:13:48 PM	1 R83191
Surr: Dibromofluoromethane	96.5	70-130	%Rec	1	11/30/2021 5:13:48 PM	1 R83191
Surr: Toluene-d8	95.9	70-130	%Rec	1	11/30/2021 5:13:48 PM	1 R83191

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
- 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 7 of 9

Date Reported: 12/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-19

 Project:
 Lateral K 51 2010
 Collection Date: 11/22/2021 1:35:00 PM

 Lab ID:
 2111B24-008
 Matrix: AQUEOUS
 Received Date: 11/23/2021 7:45:00 AM

Analyses	Result	PQL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analys	t: <b>JR</b>
Benzene	160	5.0	μg/L	5	11/30/2021 5:42:30 PM	/ R83191
Toluene	ND	5.0	μg/L	5	11/30/2021 5:42:30 PM	/ R83191
Ethylbenzene	85	5.0	μg/L	5	11/30/2021 5:42:30 PM	/ R83191
Xylenes, Total	14	7.5	μg/L	5	11/30/2021 5:42:30 PM	/ R83191
Surr: 1,2-Dichloroethane-d4	93.9	70-130	%Rec	5	11/30/2021 5:42:30 PM	/I R83191
Surr: Dibromofluoromethane	89.1	70-130	%Rec	5	11/30/2021 5:42:30 PM	/I R83191
Surr: Toluene-d8	94.8	70-130	%Rec	5	11/30/2021 5:42:30 PM	/ R83191

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

Page 8 of 9

# **QC SUMMARY REPORT**

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2111B24** 

03-Jan-22

Client: Ensolum

**Project:** Lateral K 51 2010

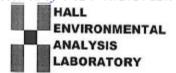
Sample ID 100ng lcs	SampT	ype: <b>LC</b>	s	TestCode: EPA Method			8260: Volatile	es Short L	ist	
Client ID: LCSW	Batch	n ID: <b>R8</b>	3191	F	RunNo: <b>83191</b>					
Prep Date:	Analysis D	Date: 11	1/30/2021	9	SeqNo: 2	955404	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.6	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.1	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID mb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260: Volatile	es Short I	_ist	
Client ID: PBW	Batch	n ID: <b>R8</b>	3191	F	RunNo: 8	3191				
Prep Date:	Analysis D	ate: <b>1</b> 1	1/30/2021	8	SeqNo: 2	955405	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	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		101	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

Page 9 of 9



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 Nam	e: ENSOLU	м	Wor	k Order Nur	mber: 211	1B24			RcptNo: 1	
Received B	By: Isaiah O	rtiz	11/23/	2021 7:45:0	00 AM		7	_ (	24	
Completed	By: Desiree	Dominguez	11/23/	2021 8:37:0	3 AM		THE	_		
Reviewed B	y: JNI	123/	21				1.4	3		
Chain of C	Custody									
1. Is Chain	of Custody com	plete?			Yes	~	No		Not Present	
2. How was	the sample del	ivered?			Cou	<u>irier</u>				
Log In										
Control of the second s	ttempt made to	cool the sam	ples?		Yes	$\checkmark$	No		NA 🗌	
4. Were all s	samples receive	d at a temper	ature of >0° C	to 6.0°C	Yes	V	No		na 🗆	
5. Sample(s	) in proper cont	ainer(s)?			Yes	V	No			
6. Sufficient	sample volume	for indicated	test(s)?		Yes	V	No			
7. Are sampl	es (except VOA	and ONG) p	roperly preserv	ed?	Yes	~	No			
8. Was prese	ervative added t	o bottles?			Yes		No	V	NA 🗆	
9. Received a	at least 1 vial w	ith headspace	<1/4" for AQ \	/OA?	Yes	V	No		NA 🗆	
10. Were any	sample contain	ers received	broken?		Yes		No	~		/
11 0						_			# of preserved bottles checked	
	erwork match bo repancies on ch		v)		Yes	~	No		for pH:	unless noted)
	es correctly idea				Yes	V	No		Adjusted2	unless noted)
	vhat analyses w				Yes					
	olding times abl		,		Yes		No		Checked by: Cu	-11/23/m
	ndling (if ap		,					- 5.5		
	t notified of all d	_	with this order	,	Yes		No		NA 🗹	
Pers	son Notified:			Date				_		
By V	Vhom:			Via:	□ eMa	ai 🗆	Phone	Fax	☐ In Person	
	arding:							_		
2.55200	nt Instructions:	1								
16. Additional										
<ol> <li>Cooler In Cooler</li> </ol>	A SECOND WIND DO	Condition	Coal Interior	0						
1	No Temp °C 0.4	Condition Good	Seal Intact Yes	Seal No	Seal Da	ate	Signed E	y		
2	1.1	Good	Vac			-				

10   Standard   D   Rush     D   Standard	טיוס-וויסווס	Cilalii-Ol-Custody Record			HALL ENVIDONMENT
17   17   17   17   17   17   17   17	Client Francisco	177			ANALYSTS I ABODATOD
Iling Addresss:  The fact if:					Paris Com
Tel. 506-345-3975  Tel. 506-345-345-345  Tel. 506-345-345  Tel. 506-345	lailing Address:	absente Suite	etal X.	(2010)	,
	Sign WAY OF		Project #:		10
Time: Religionary Sample Name Type and # Type and # Type AMA by 8310 or 8270SIMS  RORA & Metals  Continued by:  Religionary Marks  Religionary Mar	hone #:		1226		Analysis
Sample: L. Dancel A (Full Validation)  Rock & Back (VOA)  Back (VOA)  Rock & Back (V	mail or Fax#:	2009	1		***
Time: Mairix Sample: L. Daniello Container Mairix Mairix Sample: L. Daniello Container Mairix Mairix Sample: L. Daniello Container Mairix Mair	A/OC Package:				S's
Time Reinquished by Marks:    Ac Compliance   Sample: L. Daniel   Container	Standard	☐ Level 4 (Full Validation)	8000		POL
Time   Matrix   Sample   Name   Type and # Type   Time   Matrix   Sample   Name   Type and # Type   Time   Matrix   Sample   Name   Type and # Type   Type and # Type		Compliance	L.Dani		280 (1. (7. (2.)
Time Matrix Sample Name Container Preservative HEAL No. 17.79 e and # 17.70 e and # 17	-	er	□ Yes	No	8/8 8/8 104 104 104 104
Container Mairix Sample Name  Container Preservative  Type and # Type  Container Preservative  Container Preservative  Type and # Type  Container Preservative  Container Preservative  Type and # Type  Container Preservative  Type and # Type  Container Preservative  Container Preservative  Type and # Type  Container Preservative  Container Preservative  Region (VOA)  B270 (Samilland Preservative  Container Preser	EDD (Type)		ers:	TO SERVICE STATE OF THE PARTY O	VO Talsala Talsala To To To
Time   Mairix   Sample   Name   Type and #			Cooler Temp(mdusing 0F);	(0°)	MTI PED (PD )  Salice PD (PD )  Me PD (PD )  Me PD (PD )  MI PD )
## 18-50 LW WW. 14 4 LD 32-10-4145 HGC, X  ## 18-50 LW WW. 17 32-10-4145 HGC, X  ## 18-50 LW WW. 17 32-10-4145 HGC, X  ## 18-50 LW WW. 17 32-10-4145 HGC, X  ## 18-50 LW WW. 19 18-10-4145 HGC, X  ## 18-50 LW WW. 19 18-10-41	Time	Sample Name	#	HEAL No.	108:1801 2081 Pe 208 (Me 308 (Ve 308:18; Br 308:18; Br
12.50   W   WW   10   3-10   W   W   W   W   W   W   W   W   W	haply with the		4		3
	Q5-81	1-747	3-that the year!		- X
7 205 W MW-17 3240411/M W. 1. X  1235 W MW-14 3240411/M W. 1.  1240 MW-14 3240411/M W. 1.  1240 MW-17 3240	ONTH	2-5	TO BUTTON		
7 12.05 W MW-110 = 2.40.41/2	2000	KALI-17			( >
Time: Relinquished by:    12.05   W   WW - 14   24/04/Um   15/04   W   W   W   W   W   W   W   W   W			- 400		×
# 13.05 W MW 20 2.464.Up 150, x   X   X   X   X   X   X   X   X   X	1205			The state of the s	×
Time: Relinquished by: Near Date Time Remarks:	58:21	MW-14			×
Time: Relinquished by:  Received by:  Time: Relinquished by:  Time: Remarks:	13:05	MW-20	24 Hallion 150n		
Time: Relinquished by: Viaj Date Time Remarks:	200	MW-19		THE REAL PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN THE PERSON NAMED IN COLUMN TWO IS NAMED IN THE PERSON NAME	
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Time: Relinquished by: Received by: Visy Date Time Remarks:					
	Time:	hed by:	Nay /	9	200
Date: Time: Relinquished by: Via: Date Time Sill to Encoura	Time:	hed by:		Date Time	Bill to Encoun

	and a casted income		)		U		I	HAL	Z	TD	FNVTDONMENT		ived
Client: Enschun	· LLC	X Standard	□ Rush				8		Į.	10	ANALYSTS LABORATOR	TOP	by (
		Project Name:					*	led w	Dviron	www.hallenvironmental.com	mov.	5	)CD
Mailing Address: たんらんいん	Riolsonde, Saite A	Latera	i X	(2010)	4	4901 Hawkins NE	wkins		Albuar	erane.	Albuqueraue, NM 87109		: 7/3/
Aster NIN 9	01/12	Project #:				Tel. 505-345-3975	-345-		Fax	505-3	Fax 505-345-4107		/202
Phone #:		05A12	26010	0	9			Ā	alysis	Analysis Request	st		4 12
email or Fax#: ソイン・・・・・・	west -50 encolour. Colo	Δ,	ger:			1-	H		70		(hu		:33:
QA/QC Package:	☐ Level 4 (Full Validation)	K.S.	Simula			11/25/62	SMIS	OTO: 1802	S '7O-	147	ISSUV/		21 PM
:	□ Az Compliance	Sampler	0,00	TI.	4000m	100000			1,50		NI IOC		
	er	On Ice:	■ Yes	No	MARK	300,000		_	)NI		21.1		
(be)		# of Coolers:	P.O 2	J. 07. h	0007			_		2	\		
		Cooler Temp(induding CF):		(°C)	April 1972			_		1 1 5 1 7 1	IOUU		
Date Time Matrix	Sample Name	Container Type and #	Preservative Type	AIII BAY	BTEX /	8081 Pé	EDB (M	RCRA 8	CI, F, B 8260 (V	S) 0728	Total Co		
h2/21 10:115 Lv	MW-14	- 40	Hacin		×			-	_				
12/24 10:50 W	MIN-	3-4011/24	Mach	-003	′×								
ज्य भारत पर्य	NW-3-25	35 Wall VOA	Rech.	-003	×								_
in Shill refer	MW-17	3×40ml Last	Mar	-00H	×								
سا كانتا المبط	MIN - LLC	3x Poulich	Wach	-005	×								
hape 12:35 W	MW-14	SXYBALLOR	RATE	-000p	×								
haps 13:05 W	MW-20	34 Houldon	Mells	-004	' ×								
haful pass w	MW-19	3x:40milion	11924	200-	×		+		1				
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	Shed by:	Received by:	Thy.	1/12/2, 1552 Date Time			Bill to	2		Ensolar	421		Page 6
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#### ENTERPRISE PRODUCTS PARTNERS L.P. ENTERPRISE PRODUCTS GP, LLC (General Partner)

**ENTERPRISE PRODUCTS OPERATING LLC** 

July 1, 2024

Submitted online via OCD E-Permitting: https://www.apps.emnrd.nm.gov/OCD/OCDPermitting/default.aspx

Mr. Nelson Velez New Mexico Energy, Minerals & Natural Resources Department – Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

Submittal1:2023 Groundwater Monitoring Report (Ensolum, April 11, 2024)Submittal2:2022 Groundwater Monitoring Report (Ensolum, March 22, 2023)Submittal3:2021 Groundwater Monitoring Report (Ensolum, March 29, 2022)

**RE:** Enterprise Field Services, LLC

Lateral K-51 Pipeline Release (4/13/2010)

Rio Arriba Co., NM [S34 and 35, T26N R6W (36.4465° N, 107.4461° W)]

OCD RP: 3R-446; Stage 1 AP-130; Incident No. nAUTOFAB00318

Dear Mr. Velez:

Enterprise Products Operating LLC (Enterprise), on behalf of Enterprise Field Services, LLC, is pleased to submit to New Mexico Oil Conservation Department (OCD) one electronic copy (online via OCD E-Permitting) of the above-referenced documents (Submittal1, Submittal2, and Submittal3, collectively "Submittals") prepared by Ensolum, LLC (Ensolum). The Submittals are associated with the Enterprise Lateral K-51 release of natural gas condensate liquids that occurred on April 13, 2010 from a natural gas gathering pipeline, located in Rio Arriba County, New Mexico (the "Site"). Submittal1 summarizes on-site activities that occurred between January 1, 2023 and December 31, 2023 ("reporting period" for Submittal1), Submittal2 summarizes on-site activities conducted between January 1, 2022 and December 31, 2022 ("reporting period" for Submittal3), and Submittal3 summarizes on-site activities conducted between January 1, 2021 and December 31, 2021 ("reporting period" for Submittal3). During each reporting period, on-going groundwater monitoring and sampling (GWM&S) activities were continued to evaluate the magnitude and stability of the dissolved-phase hydrocarbon (DPH) plume in groundwater.

Data presented in the attached Submittals indicate that only the benzene concentrations in monitoring well MW-19 remain in excess of applicable New Mexico Water Quality Control Commission (NMWQCC) Groundwater Quality standards (GQS) and constituents of concern (COC) concentrations are generally stable and/or declining at the Site. Phase-separated hydrocarbon (PSH) has not been observed at the Site, with the exception of two anomalous events in 2012 (MW-19), which were not visually confirmed. The DPH plume is not currently delineated to the southwest of MW-19 due to an obstruction (silted in or collapsed) of MW-18; however, historical COC concentrations were all below laboratory detection limits for MW-18. Additionally, in comparing current COC data to historical data, the COC exceedances identified at MW-19 appear to be associated with another historical release source. COCs in the original release area have been below laboratory detection limits and/or applicable NMWQCC GQSs since November 2016, or earlier.

Based on the data contained within the attached Submittals, Enterprise plans to: 1) continue conducting semi-annual GWM&S events with annual sampling of monitoring wells MW-3 and MW-11 through MW-13 (as per OCD approval email dated June 8, 2020); 2) install a shallow recovery well up-gradient of monitoring well MW-19 to facilitate enhanced fluid recovery; 3) repair or replace monitoring well MW-18 as described in the *Stage 1 Abatement Plan* (Ensolum, revised May 22, 2019); 4) potentially conduct additional site-specific aquifer characterization; and, 5) prepare a *Stage 2 Abatement Plan*, if required, after concurrence that the *Stage 1 Abatement Plan* is deemed administratively complete.

Enterprise appreciates the OCD's continued assistance and guidance in bringing closure to this Site. Should you have any questions, comments, or concerns, or require additional information, please contact Scott Drewry via email (<a href="mailto:sdrewry@eprod.com">sdrewry@eprod.com</a>) or phone (713-381-5696), or our project consultant Kyle Summers (<a href="mailto:ksummers@ensolum.com">ksummers@ensolum.com</a>) with Ensolum.

Sincerely,

Jon E. Fields
Director, Environmental

cc: BLM, Farmington, NM – Mr. J. Nolan Craun <6251 College Blvd., Suite A, Farmington, NM 87402>

Landowner – Mr. Russell Luna < PO Box 753, Bloomfield, NM 87413-0753>

ec: Ensolum, Houston, TX – Mr. Kyle Summers < <u>ksummers@ensolum.com</u> >



### 2022 GROUNDWATER MONITORING REPORT

### Property:

Lateral K-51 Pipeline Release (2010)
Unit Letter H of S34 and Unit Letter E of S35 T26N R6W
Rio Arriba County, New Mexico

New Mexico EMNRD OCD RP No. 3RP-446 Abatement Plan No. 130 Incident ID No. nAUTOfAB000318

March 22, 2023

Ensolum Project No. 05A1226010

Prepared for:

P.O. Box 4324 Houston, Texas 77210-4324 Attn: Mr. Gregory E. Miller, PG

Prepared by:

Ranee Deechilly Project Manager Kyle Summers Senior Managing Geologist

Ummy

Lateral K-51 Pipeline Release (2010)

### **Executive Summary**

This report documents the 2022 groundwater monitoring activities conducted at the Lateral K-51 Pipeline Release (2010) site, referred to hereinafter as the "Site". The Site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in Sections 34 and 35, Township 26 North, Range 6 West, in Rio Arriba County, New Mexico (NM).

On April 13, 2010, a release of natural gas condensate occurred from the Lateral K-51 pipeline. The initial site assessment identified concentrations of constituents of concern (COCs) in soil and groundwater above the applicable NM Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria and the NM Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs). Delineation and initial excavation activities conducted between June 2010 and March 2012 identified additional concentrations of COCs above the applicable NM EMNRD OCD closure criteria for soils and above the NM WQCC GQSs for groundwater. During 2011, in-situ chemical oxidation (ISCO) was performed in the immediate area of the release.

Quarterly and semi-annual groundwater monitoring was conducted from 2012 through 2014 and 2015 through 2021, respectively. Groundwater samples collected during these sampling events exhibited concentrations of COCs above the WQCC standards.

The primary objective of the 2022 groundwater monitoring was to further evaluate the concentrations of COCs in groundwater and to monitor COC concentrations over time at the Site.

Findings based on these activities are as follows:

- The groundwater flow direction at the Site is generally towards the west-northwest, with an approximate average gradient of 0.008 feet per foot (ft/ft) across the Site.
- Benzene was reported at concentrations exceeding the NM WQCC GQS of 10 micrograms per liter (µg/L) (see footnote in report) in groundwater samples collected from monitoring well MW-19 during the May 2022 and November 2022 sampling events. The groundwater samples collected from the other monitoring wells sampled in 2022 did not exhibit COC concentrations above the applicable WQCC GQSs.
- Monitoring well MW-19 has exhibited relatively stable benzene concentrations since 2012.

Ensolum offers the following recommendations:

- Report the groundwater monitoring results to the NM EMNRD OCD.
- Continue semi-annual groundwater monitoring at the Site, limiting the sampling frequency of monitoring wells MW-3, MW-11, MW-12, and MW-13 to annually, as approved by the NM EMNRD OCD in an email dated June 8, 2020.
- Conduct aquifer testing, and when access allows, install a shallow recovery well upgradient
  of monitoring well MW-19 and repair or replace monitoring well MW-18, as described in the
  Stage 1 Abatement Plan and as approved by the NM EMNRD OCD in an email dated June
  8, 2020.



<b>TABL</b>			CO	NIT	EV.	P
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1.0	INTRODUCTION	. 1
1.1	Site Description & Background	. 1
1.2	Project Objective	2
2.0	GROUNDWATER MONITORING	
2.1	Groundwater Laboratory Analytical Methods	3
2.2	Groundwater Flow Direction	. 3
2.3	Groundwater Data Evaluation	3
3.0	FINDINGS	5
4.0	RECOMMENDATIONS	5
5.0	STANDARDS OF CARE, LIMITATIONS, AND RELIANCE	5
5.1	Standard of Care	. 5
5.2		5
- 0		
5.3	Reliance	c

#### LIST OF APPENDICES

### Appendix A - Figures

Figure 1: Topographic Map

Figure 2: Site Vicinity Map

Figure 3: Site Map

Figure 4A: Groundwater Gradient Map (May 2022)

Figure 4B: Groundwater Gradient Map (November 2022)

Figure 5A: Groundwater Quality Standard (GQS) Exceedance Zone Map

(May 2022)

Figure 5B: Groundwater Quality Standard (GQS) Exceedance Zone Map (November 2022)

### Appendix B - Regulatory Correspondence

### Appendix C - Tables

Table 1: Groundwater Analytical Summary

Table 2: Groundwater Elevations

### **Appendix D – Laboratory Data Sheets & Chain of Custody Documentation**

### **Appendix E – Benzene Concentration Chart**



#### 1.0 INTRODUCTION

This report describes the groundwater monitoring activities conducted at the Lateral K-51 Pipeline Release (2010) site, referred to hereinafter as the "Site".

#### 1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral K-51 Pipeline Release (2010)
NM EMNRD OCD Incident ID No.	nAUTOfAB000318
Location:	36.4465° North, 107.4461° West Unit Letter H of Section 34 and Unit Letter E of Section 35, Township 26 North, Range 6 West Rio Arriba County, New Mexico
Property:	United States (US) Bureau of Land Management (BLM) and Private Land
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On April 13, 2010, an estimated ten barrels of natural gas condensate were released from the Enterprise Lateral K-51 pipeline. The pipeline was subsequently repaired, and remediation activities were initiated to remove hydrocarbon affected soils. Souder, Miller and Associates (SMA) collected confirmation soil samples and one groundwater sample from the final excavation. The excavation was then backfilled with unaffected soils. Confirmation soil samples collected from the excavation exhibited concentrations of constituents of concern (COCs) above the applicable EMNRD OCD closure criteria for soils. The groundwater sample exhibited concentrations of COCs above the New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) for groundwater.

During June 2010, eight soil borings (BH-1 through BH-8) were advanced by LT Environmental (LTE). Four of the soil borings were completed as groundwater monitoring wells (MW-1 through MW-4). Analytical results from soil samples collected immediately adjacent to the release and near the groundwater interface (BH-1) indicated COC concentrations above the applicable New Mexico EMNRD OCD closure criteria. Analysis of groundwater samples collected from monitoring wells MW-1 through MW-4 indicated COC concentrations above the New Mexico WQCC GQSs (Site Investigation Report, LTE, August 9, 2010).

During April 2011, nine soil borings/monitoring wells (SB-9, SB-10, MW-11 through MW-14, SB-15, MW-16, and MW-17) were advanced by Southwest Geoscience (SWG) to further evaluate the extent of dissolved phase COCs in groundwater. Additionally, 15 injection points were installed to facilitate the proposed in-situ chemical oxidation (ISCO) of the COCs utilizing a hydrogen peroxide solution. ISCO activities were performed during May 2011 (Supplemental Site Investigation and Corrective Action Report, SWG, October 5, 2011). Based on the distribution of COCs in groundwater, it appears that a former drip valve, tank, or pit may have also provided a historic source of petroleum hydrocarbon impact to groundwater (New Mexico EMNRD OCD reference 3RP-206, El Paso Natural Gas, Final Pit Closure) in the vicinity of monitoring well MW-14.

During March 2012, three additional soil borings/monitoring wells (MW-18, MW-19, and MW-20) were advanced near and downgradient of the historic release area to further evaluate the extent of COCs in groundwater (Supplemental Site Investigation & Corrective Action Work Plan, SWG,



April 23, 2012). Soil boring/monitoring well MW-18 was advanced to the west of the presumed location of the historic release, and soil borings/monitoring wells MW-19 and MW-20 were advanced to the north and northwest of the presumed location of the historic release.

Quarterly and semi-annual groundwater monitoring was conducted from 2012 through 2014 and 2015 through 2018, respectively. During February 2019, Enterprise assigned management of the project to Ensolum, LLC (Ensolum).

During May of 2019, Enterprise submitted a revised Stage 1 Abatement Plan for this Site to the New Mexico EMNRD OCD (*Revised Lateral K-51 Pipeline Release (2010) Stage 1 Abatement Plan*, Ensolum, May 22, 2019). The New Mexico EMNRD OCD has not approved the plan, and Enterprise has resumed semi-annual groundwater monitoring of the Site.

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to oil and gas releases, the New Mexico EMNRD OCD references 19.15.29 New Mexico Administrative Code (NMAC) *Releases*, which establishes investigation and abatement action requirements for sites that are subject to reporting and/or corrective action. Additionally, the New Mexico EMNRD OCD utilizes the New Mexico WQCC GQS (20.6.2 NMAC *Ground and Surface Water Protection*) to evaluate groundwater conditions.<sup>1</sup>

The Site location is depicted on **Figure 1** of **Appendix A** which was reproduced from a portion of a United States Geological Survey (USGS) 7.5-minute series topographic map. A **Site Vicinity Map**, created from an aerial photograph, is provided as **Figure 2**, and a **Site Map**, which indicates the approximate locations of the monitoring wells and previous soil boring locations in relation to pertinent structures and general Site boundaries, is included as **Figure 3** of **Appendix A**.

### 1.2 Project Objective

The objective of the groundwater monitoring was to further evaluate groundwater quality at the Site and evaluate natural attenuation of COC concentrations over time.

#### 2.0 GROUNDWATER MONITORING

Ensolum conducted groundwater sampling events during May 2022 and November 2022. The groundwater sampling program consisted of the collection of one groundwater sample from each of the viable monitoring wells at the Site. Monitoring well MW-18 appears to be obstructed (silted in or collapsed) and was not sampled during either sampling event. On June 8, 2020, the New Mexico EMNRD OCD approved a request to reduce the sampling frequency for monitoring wells MW-3 and MW-11 through MW-13 to annually. Therefore, only eight monitoring wells were sampled during the November 2022 sampling event. The New Mexico EMNRD OCD was notified of the sampling events although no representative was present during the sampling activities. Regulatory correspondence is provided in **Appendix B**.

Ensolum's groundwater sampling program consisted of the following:

- Prior to sample collection, Ensolum gauged the depth to fluids in each monitoring well using an interface probe capable of detecting non-aqueous phase liquid (NAPL).
- Each designated monitoring well was sampled utilizing micro-purge low-flow sampling

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site that predates the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



techniques. Following the completion of the micro-purge process, the groundwater sample was collected.

- Low-flow or low-stress sampling refers to sampling methods that are intended to minimize
  the stress that is imparted to the formation pore water in the vicinity of the well screen. Water
  level drawdown provides the best indication of the stress that is imparted by a given flow
  rate for a given hydrological situation. Pumping rates of 0.1 to 0.5 liters per minute (L/min)
  are typically maintained during the low-flow/low-stress sampling activities, using dedicated
  or decontaminated sampling equipment.
- During low-flow sampling, the groundwater samples are collected from each monitoring well
  once produced groundwater is consistent in color, clarity, pH, temperature, and conductivity.
  Measurements are typically observed every three to five minutes while purging. Purging is
  considered complete once key parameters (especially pH and conductivity) have stabilized
  for at least three consecutive readings.
- Groundwater samples were collected in laboratory-supplied containers (pre-preserved with mercuric chloride (HgCl<sub>2</sub>)), labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico under proper chain-of-custody procedures.

### 2.1 Groundwater Laboratory Analytical Methods

The groundwater samples collected from the monitoring wells during the two sampling events were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) utilizing US Environmental Protection Agency (EPA) SW-846 Method #8021 or #8260.

A summary of the analytes, sample matrix, sample frequency and EPA-approved analytical methods are presented in the following table.

Analyte	Sample Type	No. of Samples (May/Nov)	Method
BTEX	Groundwater	12/8	SW-846 8021 or 8260

The laboratory analytical results are summarized in **Table 1** in **Appendix C**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix D**.

### 2.2 Groundwater Flow Direction

The groundwater flow direction at the Site generally trends toward the west-northwest. The calculated gradient during the 2022 monitoring events averaged approximately 0.008 feet per foot (ft/ft) across the Site. Groundwater elevation data collected during the 2022 gauging events are presented in **Table 2** (**Appendix C**). Groundwater gradient maps for the 2022 gauging events are included as **Figure 4A** and **Figure 4B** (**Appendix A**).

#### 2.3 Groundwater Data Evaluation

Ensolum compared the BTEX laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the groundwater samples collected from



monitoring wells during the 2022 groundwater sampling events to the New Mexico WQCC GQSs.<sup>1</sup> The results of the analyses are summarized in Table 1 of Appendix C. Groundwater Quality Standard Exceedance Zone maps are provided as Figure 5A and Figure 5B of Appendix A.

### May 2022

- The May 2022 analytical result for monitoring well MW-19 indicates a benzene concentration of 160 micrograms per liter (μg/L), which exceeds the WQCC GQS of 10 μg/L. The analytical results for the other sampled monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 10 µg/L.1
- The May 2022 analytical results for the sampled monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 μg/L.<sup>1</sup>
- The May 2022 analytical result for monitoring well MW-19 indicates an ethylbenzene concentration of 54 µg/L, which is below the WQCC GQS of 750 µg/L. The analytical results for the other sampled monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 µg/L.<sup>1</sup>
- The May 2022 analytical results for monitoring wells MW-4 and MW-19 indicate total xylene concentrations of 3.6 µg/L and 29 µg/L, respectively, which are below the WQCC GQS of 620 μg/L.<sup>1</sup> The analytical results for the other sampled monitoring wells do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 μg/L.<sup>1</sup>
- No data qualifier flags are associated with the May 2022 analytical results.

### November 2022

- The November 2022 analytical result for monitoring well MW-19 indicates a benzene concentration of 78 µg/L, which exceeds the WQCC GQS of 10 µg/L. The analytical results for the other sampled monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 10 µg/L.1
- The November 2022 analytical results for the sampled monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 μg/L.<sup>1</sup>
- The November 2022 analytical result for monitoring well MW-19 indicates an ethylbenzene concentration of 34 µg/L, which is below the WQCC GQS of 750 µg/L. The analytical results for the other sampled monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 µg/L.1
- The November 2022 analytical result for monitoring well MW-19 indicates a total xylenes concentration of 3.2 µg/L, which is below the WQCC GQS of 620 µg/L. 1 The analytical results for the other sampled monitoring wells do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 µg/L.1
- No data qualifier flags are associated with the November 2022 analytical results.

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site that predates the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



Based on the evaluation of the analytical results from the groundwater monitoring activities, Ensolum presents the following findings:

- The groundwater flow direction at the Site is generally towards the west-northwest, with an approximate gradient of 0.008 ft/ft across the Site.
- Benzene was reported at concentrations exceeding the New Mexico WQCC GQS of 10 µg/L in groundwater samples collected from monitoring well MW-19 during the May 2022 and November 2022 sampling events.<sup>1</sup> The groundwater samples collected from the other sampled monitoring wells in 2022 do not exhibit COC concentrations above the applicable WQCC GQSs.<sup>1</sup>
- Monitoring well MW-19 has exhibited relatively stable benzene concentrations since 2012 as depicted in the chart provided in **Appendix E**.

### 4.0 RECOMMENDATIONS

Based on the results of the groundwater monitoring activities, Ensolum has the following recommendations:

- Report the groundwater monitoring data to the New Mexico EMNRD OCD.
- Continue semi-annual groundwater monitoring at the Site, limiting the sampling frequency of monitoring wells MW-3, MW-11, MW-12, and MW-13 to annually, as approved by the New Mexico EMNRD OCD in an email dated June 8, 2020.
- Conduct aquifer testing, and when access allows, install a shallow recovery well upgradient
  of monitoring well MW-19 and repair or replace monitoring well MW-18, as described in the
  Stage 1 Abatement Plan and as approved by the New Mexico EMNRD OCD in an email dated
  June 8, 2020.

### 5.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

#### 5.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

#### 5.2 Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work, and it should be noted that this information is subject to change over time. Certain indicators

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site that predates the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



March 22, 2023

Page 6

of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendation are based solely upon data available to Ensolum at the time of these services.

#### 5.3 Reliance

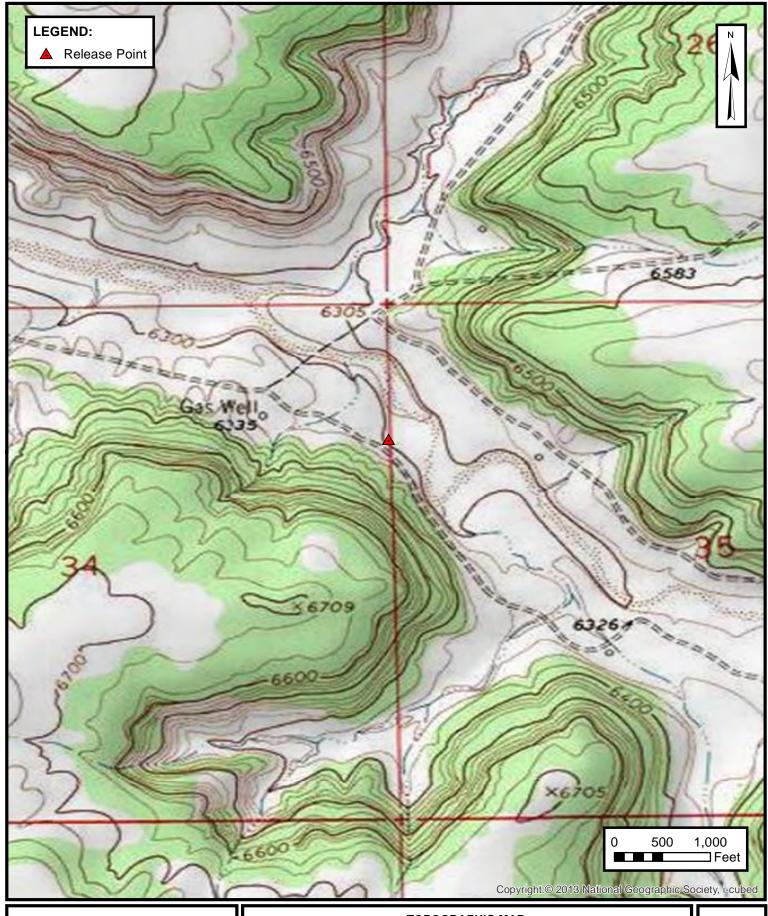
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the Closure Report and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



### **ENSOLUM**

## **APPENDIX A**

**Figures** 





### TOPOGRAPHIC MAP

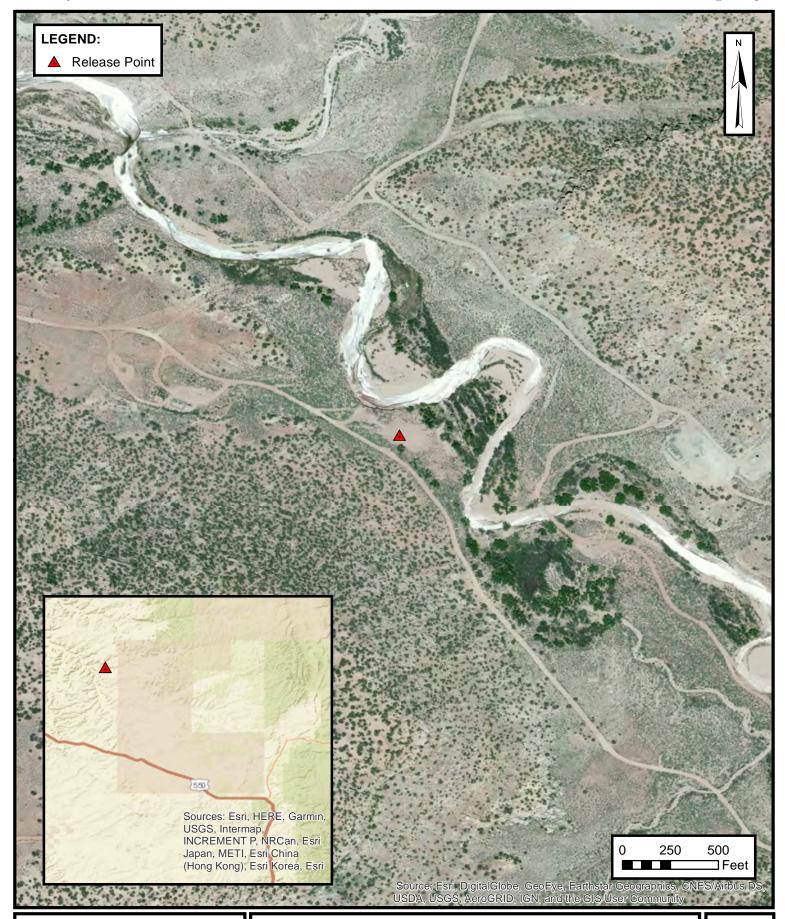
ENTERPRISE FIELD SERVICES, LLC

LATERAL K-51 PIPELINE RELEASE
Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico
36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

**FIGURE** 

1





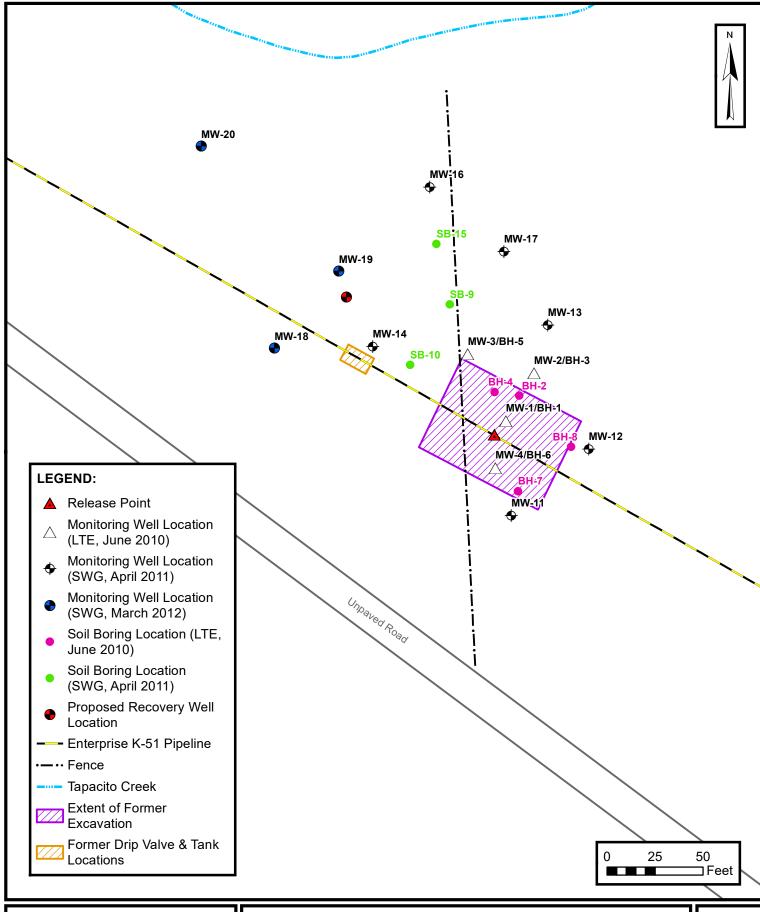
### SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL K-51 PIPELINE RELEASE
Unit Letter H S34 and Unit Letter E S35 T26N R6W, Rio Arriba County, New Mexico
36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

**FIGURE** 

2





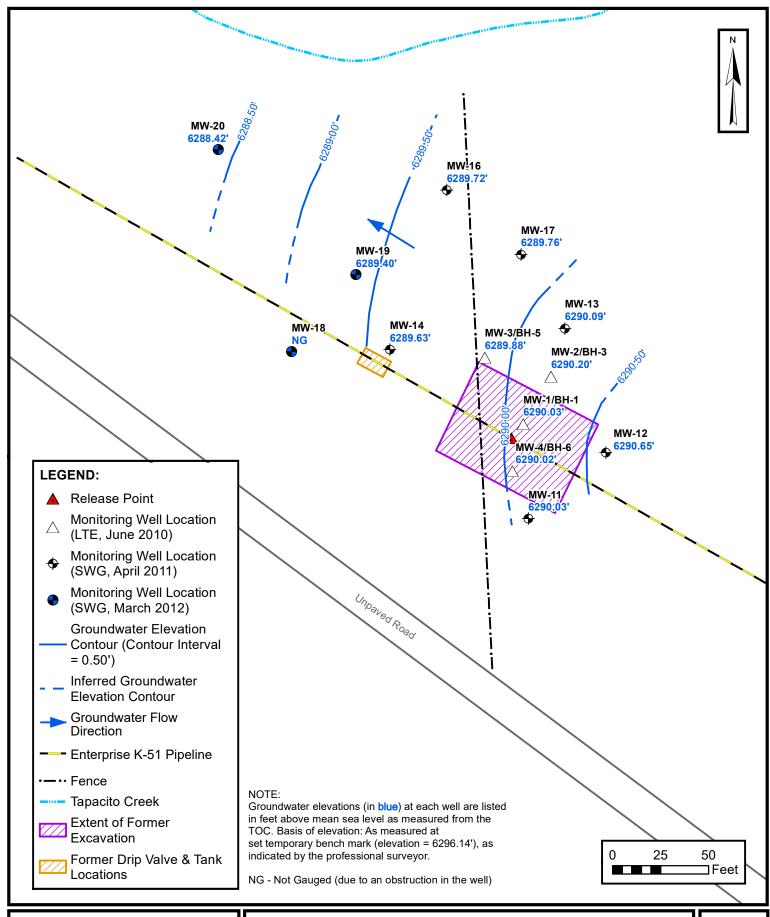
#### SITE MAP

ENTERPRISE FIELD SERVICES, LLC

LATERAL K-51 PIPELINE RELEASE
Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico

36.4465° N, 107.4461° W Ensolum Project No.: 05A1226010 **FIGURE** 

3



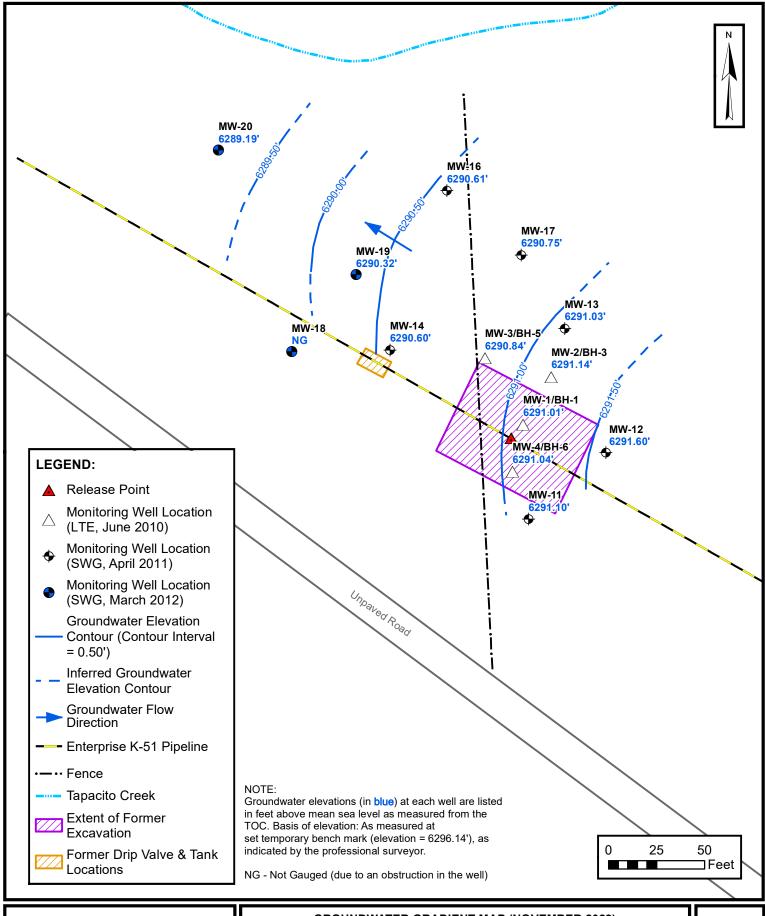


#### **GROUNDWATER GRADIENT MAP (MAY 2022)**

ENTERPRISE FIELD SERVICES, LLC
LATERAL K-51 PIPELINE RELEASE
Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico
36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

FIGURE  $\Delta$ 





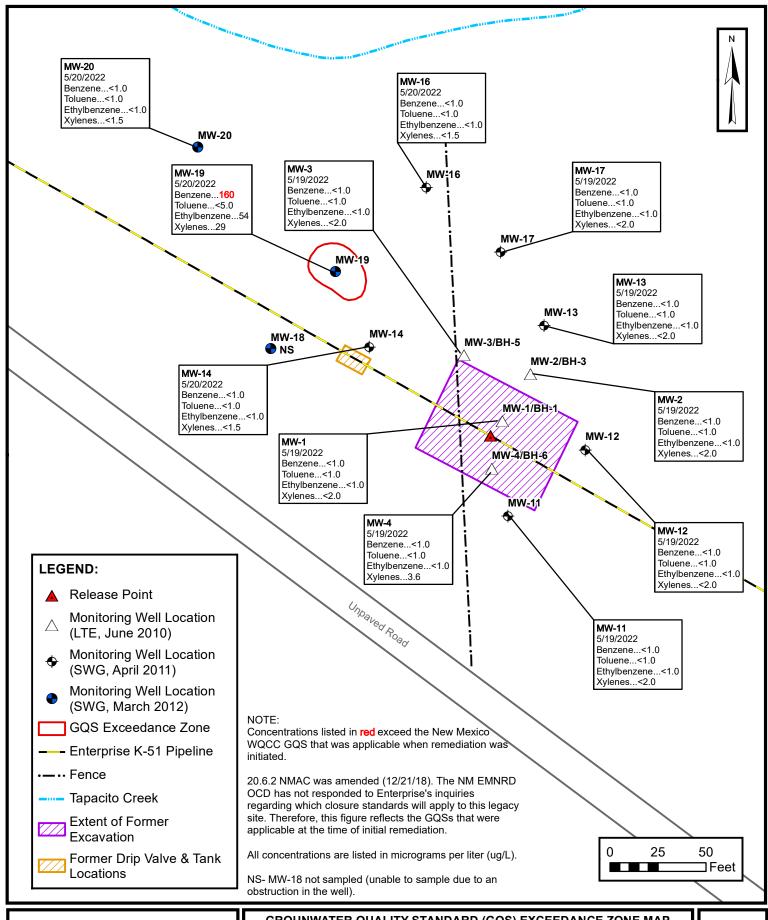
#### **GROUNDWATER GRADIENT MAP (NOVEMBER 2022)**

ENTERPRISE FIELD SERVICES, LLC LATERAL K-51 PIPELINE RELEASE
Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico

36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

**FIGURE 4B** 



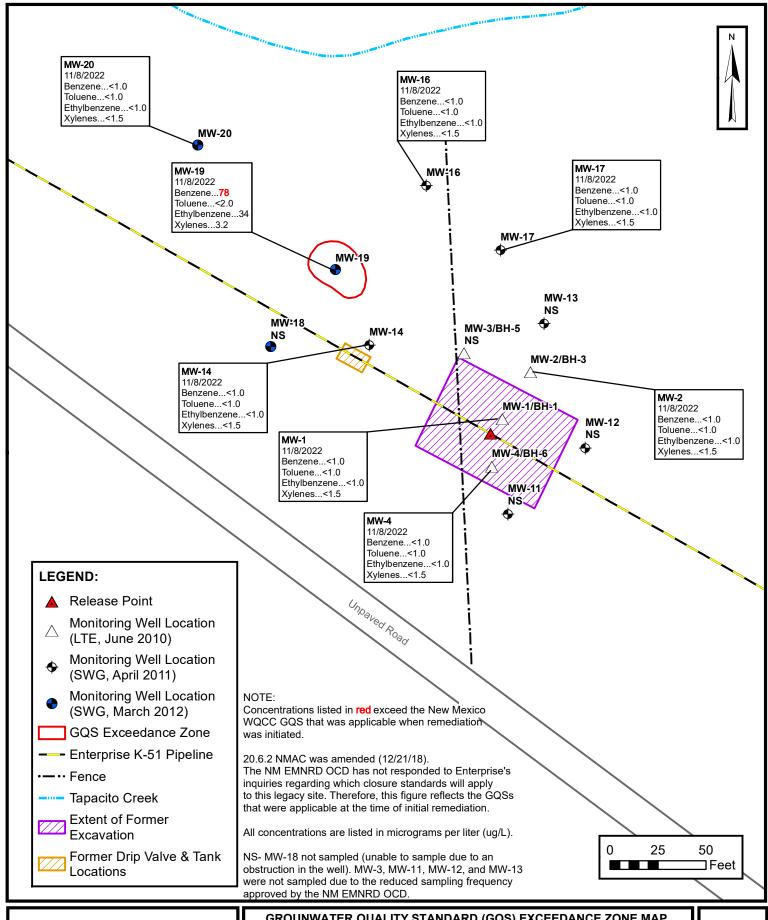


### **GROUNWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP** (MAY 2022)

ENTERPRISE FIELD SERVICES, LLC

LATERAL K-51 PIPELINE RELEASE
Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, 107.4461° W Ensolum Project No.: 05A1226010

**FIGURE 5A** 





### **GROUNWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP** (NOVEMBER 2022)

ENTERPRISE FIELD SERVICES, LLC

LATERAL K-51 PIPELINE RELEASE
Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

**FIGURE 5B** 



## **APPENDIX B**

Regulatory Correspondence

From: Kyle Summers

To: <u>Landon Daniell</u>; <u>Ranee Deechilly</u>

Subject: FW: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344 - Section 34/35

T26N R6W; 36.4465, -107.4461

**Date:** Monday, October 31, 2022 12:18:35 PM

Attachments: image003.png

image004.png image005.png



Kyle Summers Principal 903-821-5603 Ensolum, LLC

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, October 31, 2022 10:24 AM

**To:** Velez, Nelson, EMNRD < Nelson. Velez@state.nm.us>

**Cc:** Stone, Brian <br/> <br/> Smstone@eprod.com>; Miller, Greg <GEMiller@eprod.com>; Kyle Summers

<ksummers@ensolum.com>; Miller, Greg <GEMiller@eprod.com>

Subject: RE: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344

- Section 34/35 T26N R6W; 36.4465, -107.4461

### [\*\*EXTERNAL EMAIL\*\*]

Nelson,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Thursday, November 3, 2022. Field work is anticipated to take one to two working days. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Velez, Nelson, EMNRD < Nelson. Velez@state.nm.us >

**Sent:** Friday, May 13, 2022 8:06 AM **To:** Long, Thomas < tilong@eprod.com>

**Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>; Miller, Greg <<u>GEMiller@eprod.com</u>>; Kyle Summers <<u>ksummers@ensolum.com</u>>

**Subject:** RE: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344 - Section 34/35 T26N R6W; 36.4465, -107.4461

### [Use caution with links/attachments]

Tom,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please proceed with your sampling. For whatever reason, the sample collection timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of the rescheduling may result in the sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

If you have any questions, please contact me via email at your convenience.

Thanks again

Regards,

**Nelson Velez** • Environmental Specialist - Adv Environmental Bureau | EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87410 (505) 469-6146 | nelson.velez@state.nm.us

Hrs.: 7:00-11:00 am & 12:00-3:30 pm Mon.-Thur. 7:00-11:00 am & 12:00-4:00 pm Fri.

From: Long, Thomas <tilong@eprod.com>
Sent: Friday, May 13, 2022 7:52 AM

**To:** Velez, Nelson, EMNRD < Nelson. Velez@state.nm.us>

**Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>; Miller, Greg <<u>GEMiller@eprod.com</u>>; Kyle Summers

<<u>ksummers@ensolum.com</u>>

**Subject:** [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344 - Section 34/35 T26N R6W; 36.4465, -107.4461

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Nelson,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Thursday, May 19, 2022. Field work is anticipated to take one working day. If you have any questions, please call or email.

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From: Long, Thomas

Sent: Thursday, November 18, 2021 8:12 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Miller, Greg < GEMiller@eprod.com >; Griswold, Jim,

EMNRD < Jim. Griswold@state.nm.us>

Subject: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344 - Section 34/35

T26N R6W; 36.4465, -107.4461

Cory,

This email is to notify you that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Monday, November 22, 2021. Field work is anticipated to take one working day. If you have any questions, please call or email.

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## **APPENDIX C**

**Tables** 



			TABLE	1			
		Lateral K		Release (2010)			
				TICAL SUMMARY	<u>r</u>		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
						(mg/L)	(mg/L)
New Mexico Wa	ter Quality Control						
	roundwater Quality	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
Stat	iuaius	SMA	l Sample - Oper	Excavation			
Excavation	4.21.10	7,000	13,000	540	5,200	NA	NA
Executation	1.21.10	•	oring Wells Ins		0,200	10/1	10.1
	6.21.10	8,400	1,300	560	4,200	NA	NA
	9.24.10	2,300	28	200	520	8.4	<1.0
	4.21.11	430	<20	120	60	2.1	<1.0
	6.21.11	820	370	33	140	5.1	130
	9.22.11	690	1,200	120	1,200	8.9	30
	12.13.11	260	250	54	650	3.4	<1.0
	3.20.12	280	230	94	550	3.5	<1.0
	6.19.12	300	<5.0	81	96	1.7	<1.0
	9.20.12*	45	3.4	15	23	0.45	<1.0
	12.17.12	34	<1.0	11	16	0.19	<1.0
	3.25.13	41	<1.0	19	32	0.27	<1.0
	6.27.13	24	<1.0	<1.0	36	0.22	<1.0
	10.22.13	39	<1.0	24	13	0.23	<1.0
	12.16.13	10	<1.0	14	11	0.18	<1.0
	4.18.14	23	<1.0	28	86	0.38	1.1
MW-1	11.6.14	32	<1.0	27	61	NA	NA
IVIVV-I	5.29.15	11	<1.0	21	55	NA	NA
	12.1.15	5.3	<1.0	4.0	6.2	NA	NA
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.16	17	<1.0	1.6	2.4	NA	NA
	5.30.17	4.1	<1.0	<1.0	<1.5	NA	NA
	12.07.17	2.8	<1.0	2.0	<1.5	NA	NA
	5.30.18	3.0	<1.0	<1.0	2.2	NA	NA
	11.2.18	1.2	<1.0	<1.0	<1.5	NA	NA
	9.25.19	1.8	<1.0	<1.0	<2.0	NA	NA
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA



			TABLE	1			
				Release (2010)			
		GROUNDW	ATER ANALY	TICAL SUMMAR	<u>′</u>		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
						(mg/L)	(mg/L)
Commmission G	er Quality Control coundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	6.21.10	200	53	14	96	NA	NA
	9.24.10	2.3	<1.0	<1.0	<2.0	<0.050	<1.0
	4.21.11	3.3	<1.0	<1.0	<2.0	0.065	<1.0
	6.21.11	2.2	<1.0	<1.0	<2.0	<0.050	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-2	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA
10100-2	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA



		Lateral K	TABLE	1 Release (2010)			
				TICAL SUMMAR	<u>r</u>		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
						(mg/L)	(mg/L)
Commmission G	er Quality Control coundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	6.21.10	640	57	72	1,000	NA	NA
	9.24.10	150	<1.0	16	28	0.48	<1.0
	4.21.11	52	<1.0	17	10	0.25	<1.0
	6.21.11	62	14	13	160	0.67	<1.0
	9.22.11	3	<1.0	8.7	<2.0	0.066	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	1.3	<1.0	1.9	<2.0	<0.050	<1.0
	6.19.12	3.1	<1.0	1.4	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
MW-3	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA
10100-3	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.30.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.07.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 <sup>B</sup>	NS	NS	NS	NS	NS	NS



			TABLE	1			
				Release (2010)			
		GROUNDW	ATER ANALY	TICAL SUMMAR	<u>′</u>		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
						(mg/L)	(mg/L)
Commmission G	ter Quality Control roundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	6.21.10	3,600	10,000	600	6,600	NA	NA
	9.24.10	870	870	260	1,600	12	1
	4.21.11	670	<20	520	790	6.3	<1.0
	6.21.11	17	22	36	77	0.64	1.1
	9.22.11	62	140	220	820	3.8	1.2
	12.13.11	84	<20	430	490	2.6	<1.0
	3.20.12	36	<20	1,100	1,400	6.5	<1.0
	6.19.12	37	<5.0	250	350	2.2	<1.0
	9.19.12	9.4	1.4	74	97	0.84	<1.0
	12.17.12	<1.0	<1.0	6.2	9.7	0.12	<1.0
	3.25.13	3.2	<1.0	51	55	1.0	<1.0
	6.27.13	3.9	<1.0	61	60	1.3	<1.0
	10.22.13	<1.0	<1.0	12	3.8	0.13	<1.0
	12.13.13	<1.0	<1.0	16	6.2	0.4	<1.0
	4.17.14	<1.0	<1.0	76	14	0.78	<1.0
MW-4	11.6.14	<1.0	<1.0	11	2.9	NA	NA
IVIVV-4	5.29.15	<1.0	<1.0	24	6.1	NA	NA
	12.1.15	<1.0	<1.0	2.5	2.1	NA	NA
	5.25.16	<1.0	<1.0	7.4	<2.0	NA	NA
	11.8.16	2.4	<1.0	4.8	2.1	NA	NA
	5.26.17	<1.0	<1.0	3.9	<1.5	NA	NA
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	2.9	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.19.22	<1.0	<1.0	<1.0	3.6	NA	NA
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA

			TABLE	1			
		Lateral K		Release (2010)			
		GROUNDW	ATER ANALY	TICAL SUMMARY	<u> </u>		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
						(mg/L)	(mg/L)
	er Quality Control	10 <sup>A</sup>			٨		
	Commmission Groundwater Quality Standards		750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
		ells Installed b	v Apex TITAN	(formerly South	west Geosciei	nce)	
	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-11	5.29.15	<1.0	<1.0	<1.0	<2.0	NA	NA
IVIVV-II	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 <sup>B</sup>	NS	NS	NS	NS	NS	NS

			TABLE	1			
				Release (2010)			
		GROUNDW	ATER ANALY	TICAL SUMMAR	<u> </u>		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
						(mg/L)	(mg/L)
Commmission Gr	er Quality Control oundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	4.21.11	1.9	<1.0	<1.0	<2.0	<0.050	<1.0
	6.21.11	4.6	<1.0	<1.0	<2.0	0.063	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	1.7	<1.0	<1.0	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-12	5.29.15	<1.0	<1.0	<1.0	<2.0	NA	NA
10100-12	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 <sup>B</sup>	NS	NS	NS	NS	NS	NS

	TABLE 1  Lateral K-51 Pipeline Release (2010)  GROUNDWATER ANALYTICAL SUMMARY									
0	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH			
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO			
Commmission Gr	New Mexico Water Quality Control Commmission Groundwater Quality Standards		750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	(mg/L)	(mg/L)			
	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	9.20.12	NS	NS	NS	NS	NS	NS			
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.12.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA			
MW-13	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA			
10100-13	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA			
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA			
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA			
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS			
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.8.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS			

	TABLE 1  Lateral K-51 Pipeline Release (2010)										
				TICAL SUMMAR	(						
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	ТРН				
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO				
						(mg/L)	(mg/L)				
Commmission Gr	er Quality Control coundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE				
	4.21.11	2,800	<100	280	720	8.7	<1.0				
	6.21.11	470	<10	37	210	1.9	<1.0				
	9.22.11	540	<10	100	36	1.7	<1.0				
	12.13.11	220	<10	110	<20	1.0	<1.0				
	3.20.12	660	<5.0	240	15	2.9	<1.0				
	6.19.12	660	<5.0	300	100	3.4	<1.0				
	9.20.12*	7.3	<1.0	<1.0	<2.0	0.1	<1.0				
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	3.25.13	<1.0	<1.0	1.6	<2.0	<0.050	<1.0				
	6.27.13	34	4.4	30	130	0.56	1.4				
	10.22.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.16.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	4.18.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA				
MW-14	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
10100-14	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.7.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA				
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.20.22	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA				



	TABLE 1  Lateral K-51 Pipeline Release (2010)  GROUNDWATER ANALYTICAL SUMMARY									
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	ТРН	TPH			
Sample I.D.	Date	(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO			
Cumpic ii.		(F9/-)	(rg/-)	(49,-)	(Fg/=)	(mg/L)	(mg/L)			
Commmission Gr	New Mexico Water Quality Control Commmission Groundwater Quality Standards		750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE NE			
	4.21.11	4.4	<2.0	<2.0	<4.0	<0.10	<1.0			
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	9.22.11	<1.0	<1.0	<1.0	<2.0	0.065	<1.0			
	12.13.11	<1.0	<1.0	<1.0	<2.0	0.12	<1.0			
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.17.12	3.1	<1.0	2.1	14	0.19	<1.0			
	3.25.13	<1.0	<1.0	<1.0	<1.0	<0.050	<1.0			
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.12.13	1	<1.0	<1.0	<2.0	<0.050	<1.0			
	4.17.14	1.4	<1.0	<1.0	<2.0	<0.050	<1.0			
	11.6.14	1.2	<1.0	<1.0	<2.0	NA	NA			
MW-16	5.29.15	3.0	<1.0	<1.0	<2.0	NA	NA			
10100-10	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.25.16	2.2	<1.0	<1.0	<2.0	NA	NA			
	11.7.16	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.30.17	2.1	<1.0	<1.0	<1.5	NA	NA			
	12.7.17	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.2.18	<1.0	<1.0	<1.0	<1.5	NA	NA			
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA			
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.20.22	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA			

			TABLE	1			
				Release (2010)			
		GROUNDW	ATER ANALY	TICAL SUMMAR	<u> </u>		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
						(mg/L)	(mg/L)
Commmission Gr	New Mexico Water Quality Control Commmission Groundwater Quality Standards		750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	4.21.11	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0
	6.21.11	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.12.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-17	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA
10100 17	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.7.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.7.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA



#### TABLE 1 Lateral K-51 Pipeline Release (2010) **GROUNDWATER ANALYTICAL SUMMARY** Date TPH TPH Benzene Toluene Ethylbenzene **Xylenes** Sample I.D. $(\mu g/L)$ $(\mu g/L)$ $(\mu g/L)$ $(\mu g/L)$ **GRO** DRO (mg/L) (mg/L) **New Mexico Water Quality Control** 10<sup>A</sup> **Commmission Groundwater Quality** 750<sup>A</sup> 750<sup>A</sup> 620<sup>A</sup> NE NE **Standards** 3.20.12 <2.0 < 0.050 <1.0 <1.0 <1.0 <1.0 6.19.12 <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 9.20.12\* <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 12.17.12 <2.0 <2.0 <2.0 <4.0 < 0.10 <1.0 3.25.13 NS NS NS NS NS NS 6.27.13 NS 10.21.13 12.12.13 NS NS NS NS NS NS 4.17.14 NS NS NS NS NS NS 11.6.14 NS NS NS NS NS NS 5.29.15 NS NS NS NS NS NS 11.30.15 NS NS NS NS NS NS 5.25.16 NS NS NS NS NS NS MW-18 11.7.16 NS NS NS NS NS NS 5.26.17 NS NS NS NS NS NS 12.07.17 NS NS NS NS NS NS 5.30.18 NS NS NS NS NS NS 11.1.18 NS NS NS NS NS NS 9.20.19 NS 1.31.20 NS NS 5.8.20 NS NS NS NS NS NS NS 11.11.20 NS NS NS NS NS NS NS 5.28.21 NS NS NS NS 11.22.21 NS NS NS NS NS NS 5.19.22 NS NS NS NS NS NS 11.8.22 NS NS NS NS NS NS



	TABLE 1  Lateral K-51 Pipeline Release (2010)  GROUNDWATER ANALYTICAL SUMMARY											
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH					
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO					
						(mg/L)	(mg/L)					
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE					
	3.20.12	250	56	310	3,900	16	5.3					
	6.19.12	NAPL	NAPL	NAPL	NAPL	NA	NA					
	9.19.12	NAPL	NAPL	NAPL	NAPL	NA	NA					
	12.17.12	180	<5.0	5.4	23	2.2	2.6					
	3.25.13	160	<5.0	17	<10	1.5	1.4					
	6.27.13	390	<1.0	79	66	2.7	5.9					
	10.22.13	140	<1.0	<1.0	<2.0	0.51	2.1					
	12.16.13	160	<1.0	37	12	1.4	4.2					
	4.18.14	230	<1.0	41	53	2.2	10					
	11.6.14	260	<1.0	75	42	NA	NA					
	5.29.15	190	<1.0	7.2	81	NA	NA					
	12.1.15	210	<1.0	75	23	NA	NA					
MW-19	5.26.16	260	<1.0	86	340	NA	NA					
10100-19	11.8.16	270	<1.0	80	190	NA	NA					
	5.30.17	270	<1.0	88	640	NA	NA					
	12.7.17	180	<1.0	70	150	NA	NA					
	5.31.18	250	<10	83	260	NA	NA					
	11.2.18	230	<5.0	62	280	NA	NA					
	9.25.19	340	<5.0	88	380	NA	NA					
	2.4.20	100	<5.0	51	28	NA	NA					
	5.11.20	97	<5.0	54	15	NA	NA					
	11.12.20	240	<2.0	80	50	NA	NA					
	5.28.21	120	<5.0	63	19	NA	NA					
	11.22.21	160	<5.0	85	14	NA	NA					
	5.20.22	160	<5.0	54	29	NA	NA					
	11.8.22	78	<2.0	34	3.2	NA	NA					



#### TABLE 1 Lateral K-51 Pipeline Release (2010) **GROUNDWATER ANALYTICAL SUMMARY** Date Benzene Toluene Ethylbenzene **Xylenes TPH** TPH Sample I.D. **GRO** DRO $(\mu g/L)$ $(\mu g/L)$ $(\mu g/L)$ $(\mu g/L)$ (mg/L) (mg/L) **New Mexico Water Quality Control Commmission Groundwater Quality** 10<sup>A</sup> 750<sup>A</sup> 750<sup>A</sup> 620<sup>A</sup> NE NF **Standards** 3.20.12 <1.0 1.1 3.3 0.14 <1.0 35 <2.0 6.19.12 3.4 <1.0 <1.0 <0.050 <1.0 9.20.12\* 4.7 <1.0 <1.0 <2.0 <0.050 <1.0 12.17.12\* <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 <0.050 3.25.13\* <1.0 <1.0 <1.0 < 2.0 <1.0 6.27.13\* <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 10.22.13\* <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 12.16.13\* <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 4.18.14\* <1.0 <1.0 <1.0 <2.0 <0.050 <1.0 11.6.14\* <1.0 <1.0 <1.0 <2.0 NA NA 5.29.15 <1.0 <1.0 <1.0 <2.0 NA NA 12.1.15 <1.0 <1.0 <1.0 <2.0 NA NA 5.26.16 <1.0 <1.0 <1.0 <2.0 NA NA MW-20 11.7.16 <1.0 <1.0 <1.0 <2.0 NA NA 5.30.17 <1.0 <1.0 <1.0 <1.5 NA NA 12.7.17 <1.0 <1.0 <1.0 <1.5 NA NA 5.31.18 <1.0 <1.0 <1.0 <1.5 NA NA 11.2.18 <1.0 <1.0 <1.0 <1.5 NA NΑ 9.25.19 <1.0 <1.0 <1.0 <2.0 NA NA 1.31.20 <1.0 <1.0 <1.0 <2.0 NA NΑ 5.11.20 <1.0 <1.0 <1.0 <1.5 NA NA 11.12.20 <1.0 <1.0 <1.0 <1.5 NA NA 5.28.21 <1.0 <1.0 <1.0 <2.0 NA NA 11.22.21 <1.0 <1.0 <1.0 <1.5 NA NA 5.20.22 <1.0 <1.0 <1.0 <1.5 NA NA 11.8.22 <1.0 <1.0 <1.0 <1.5 NA NA

Note: Concentrations in bold and yellow exceed the WQCC GQS that was applicable when remediation was initiated.

μ g/L= micrograms per liter

mg/L= milligrams per liter

NA = Not Analyzed

NS = Not Sampled

NE = Not Established

NAPL = Non-aqueous phase liquid

\* = piezometer well was replaced with associated monitoring well

NAPL = Non-aqueous phase liquid

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

A = NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site. Therefore, this table reflects the groundwater quality standards that were applicable at the time of initial remediation.

<sup>&</sup>lt;sup>B</sup> = This monitoring well was not sampled during this sampling event. On June 8, 2020 the New Mexico EMNRD OCD approved Enterprise's request to reduce sampling events in MW-3, MW-11, MW-12, and MW-13 to annual events.

<sup>\* =</sup> Monitoring well purged/sampled utilizing disposable bailer during this event



				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)	711101111000	(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
		(leet B100)	(ICCL B100)		(ICCL B100)	(icci Bioo)	(ICCL AMOL)	(ICCL AMOL)
	4.21.11	ND	11.80	ND				6289.09
	6.21.11	ND	12.16	ND				6288.73
	9.22.11	ND	12.92	ND				6287.97
	12.13.11	ND	12.45	ND				6288.44
	3.20.12	ND	12.13	ND				6288.76
	6.19.12	ND	12.76	ND				6288.13
	9.19.12	ND	13.10	ND				6287.79
	12.17.12	ND	12.33	ND				6288.56
	3.15.13	ND	11.88	ND				6289.01
	6.27.13	ND	12.61	ND				6288.28
	10.22.13	ND	11.71	ND				6289.18
	12.12.13	ND	11.35	ND			6289.54	
	4.18.14	ND	11.04	ND				6289.85
	11.6.14	ND	11.56	ND				6289.33
MW-1	5.28.15	ND	10.86	ND	17.71	7.71-17.71	6300.89	6290.03
1010 0 - 1	11.30.15	ND	10.90	ND	17.71	7.71-17.71	0000.00	6289.99
	5.25.16	ND	10.52	ND				6290.37
	11.07.16	ND	11.42	ND				6289.47
	5.26.17	ND	10.41	ND				6290.48
	12.06.17	ND	10.53	ND				6290.36
	5.30.18	ND	10.67	ND				6290.22
	11.01.18	ND	11.59	ND				6289.30
	9.20.19	ND	12.08	ND				6288.81
	1.31.20	ND	11.13	ND				6289.76
	5.8.20	ND	10.81	ND				6290.08
	11.11.20	ND	11.55	ND				6289.34
	5.28.21	ND	10.92	ND				6289.97
	11.22.21	ND	11.69	ND	1			6289.20
	5.19.22	ND	10.86	ND				6290.03
	11.8.22	ND	9.88	ND				6291.01



				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
				THICKHESS			(foot AMCL)	
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	10.55	ND				6289.27
	6.21.11	ND	11.87	ND				6287.95
	9.22.11	ND	11.86	ND				6287.96
	12.13.11	ND	11.38	ND				6288.44
	3.20.12	ND	10.95	ND				6288.87
	6.19.12	ND	11.64	ND				6288.18
	9.19.12	ND	12.10	ND				6287.72
	12.17.12	ND	11.23	ND				6288.59
	3.15.13	ND	10.65	ND		8.45-18.45		6289.17
	6.27.13	ND	11.44	ND	18.45			6288.38
	10.21.13	ND	10.44	ND				6289.38
	12.12.13	ND	10.09	ND				6289.73
	4.17.14	ND	9.73	ND				6290.09
	11.6.14	ND	10.33	ND			ļ	6289.49
MW-2	5.28.15	ND	9.61	ND			6299.82	6290.21
1010 0 -2	11.30.15	ND	9.67	ND				6290.15
	5.25.16	ND	9.34	ND				6290.48
	11.07.16	ND	10.24	ND				6289.58
	5.26.17	ND	9.23	ND				6290.59
	12.06.17	ND	9.33	ND				6290.49
	5.30.18	ND	9.46	ND				6290.36
	11.01.18	ND	10.43	ND				6289.39
	9.20.19	ND	10.95	ND				6288.87
	1.31.20	ND	9.91	ND				6289.91
	5.8.20	ND	9.55	ND				6290.27
	11.11.20	ND	10.35	ND	1			6289.47
	5.28.21	ND	9.68	ND				6290.14
	11.22.21	ND	10.53	ND				6289.29
	5.19.22	ND	9.62	ND				6290.20
	11.8.22	ND	8.68	ND				6291.14



				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
		(10012100)	(10012100)		(10012100)	(10012100)	(10007111102)	(10017111102)
	4.21.11	ND	11.30	ND				6288.92
	6.21.11	ND	11.64	ND				6288.58
	9.22.11	ND	12.45	ND				6287.77
	12.13.11	ND	11.89	ND				6288.33
	3.20.12	ND	11.60	ND				6288.62
	6.19.12	ND	12.22	ND				6288.00
	9.19.12	ND	12.53	ND				6287.69
	12.17.12	ND	11.75	ND				6288.47
	3.15.13	ND	11.37	ND				6288.85
	6.27.13	ND	12.06	ND	18.39	8.39-18.39		6288.16
	10.21.13	ND	11.12	ND				6289.10
	12.12.13	ND	10.84	ND				6289.38
	4.17.14	ND	10.55	ND				6289.67
	11.6.14	ND	11.02	ND				6289.20
MW-3	5.28.15	ND	10.37	ND			6300.22	6289.85
10100-5	11.30.15	ND	10.40	ND			0000.22	6289.82
	5.25.16	ND	10.10	ND				6290.12
	11.07.16	ND	10.90	ND				6289.32
	5.26.17	ND	10.00	ND				6290.22
	12.06.17	ND	10.05	ND				6290.17
	5.30.18	ND	10.14	ND				6290.08
	11.01.18	ND	11.07	ND				6289.15
	9.20.19	ND	11.53	ND				6288.69
	1.31.20	ND	10.62	ND				6289.60
	5.11.20	ND	10.31	ND				6289.91
	11.11.20	ND	11.03	ND				6289.19
	5.28.21	ND	10.42	ND				6289.80
	11.22.21	ND	11.16	ND				6289.06
	5.19.22	ND	10.34	ND				6289.88
	11.8.22	ND	9.38	ND				6290.84



				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)	Thickness	(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
		(leet BTOC)	(leet BTOC)		(leet B1OC)	(leet BTOC)	(leet AMSL)	(Teet AlviSL)
	4.21.11	ND	11.90	ND				6289.01
	6.21.11	ND	12.18	ND				6288.73
	9.22.11	ND	12.90	ND				6288.01
	12.13.11	ND	12.41	ND				6288.50
	3.20.12	ND	12.45	ND				6288.46
	6.19.12	ND	12.72	ND				6288.19
	9.19.12	ND	13.09	ND				6287.82
	12.17.12	ND	12.33	ND				6288.58
	3.15.13	ND	11.85	ND		9.47-19.47		6289.06
	6.27.13	ND	12.60	ND	19.47			6288.31
	10.22.13	ND	11.74	ND				6289.17
	12.12.13	ND	11.37	ND				6289.54
	4.17.14	ND	11.05	ND				6289.86
	11.6.14	ND	11.58	ND				6289.33
MW-4	5.28.15	ND	10.91	ND			6300.91	6290.00
10100-4	11.30.15	ND	10.94	ND				6289.97
	5.25.16	ND	10.59	ND				6290.32
	11.07.16	ND	11.43	ND				6289.48
	5.26.17	ND	10.47	ND				6290.44
	12.06.17	ND	10.60	ND				6290.31
	5.30.18	ND	10.69	ND				6290.22
	11.01.18	ND	11.58	ND				6289.33
	9.20.19	ND	12.04	ND				6288.87
	1.31.20	ND	11.14	ND				6289.77
	5.8.20	ND	10.83	ND				6290.08
	11.11.20	ND	11.54	ND				6289.37
	5.28.21	ND	10.98	ND				6289.93
	11.22.21	ND	11.66	ND				6289.25
	5.19.22	ND	10.89	ND				6290.02
	11.8.22	ND	9.87	ND				6291.04



GROUNDWATER ELEVATIONS									
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*	
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)	
	4.21.11	ND	11.98	ND				6289.21	
	6.21.11	ND	12.40	ND				6288.79	
	9.22.11	ND	13.07	ND				6288.12	
	12.13.11	ND	12.55	ND				6288.64	
	3.20.12	ND	12.26	ND				6288.93	
	6.19.12	ND	12.93	ND				6288.26	
	9.19.12	ND	13.27	ND		9.07-19.07		6287.92	
	12.17.12	ND	12.51	ND				6288.68	
	3.15.13	ND	12.05	ND				6289.14	
	6.27.13	ND	12.82	ND	19.07			6288.37	
	10.21.13	ND	11.94	ND				6289.25	
	12.12.13	ND	11.61	ND				6289.58	
	4.17.14	ND	11.25	ND				6289.94	
	11.6.14	ND	11.80	ND				6289.39	
MW-11	5.28.15	ND	11.12	ND			6301.19	6290.07	
10100-11	11.30.15	ND	11.18	ND			0301.13	6290.01	
	5.25.16	ND	10.79	ND				6290.40	
	11.07.16	ND	11.66	ND				6289.53	
	5.26.17	ND	10.66	ND				6290.53	
	12.06.17	ND	10.82	ND				6290.37	
	5.30.18	ND	10.88	ND				6290.31	
	11.01.18	ND	11.82	ND				6289.37	
	9.20.19	ND	12.26	ND				6288.93	
	1.31.20	ND	11.39	ND				6289.80	
	5.8.20	ND	11.07	ND				6290.12	
	11.11.20	ND	11.79	ND				6289.40	
	5.28.21	ND	11.24	ND				6289.95	
	11.22.21	ND	11.92	ND				6289.27	
	5.19.22	ND	11.16	ND				6290.03	
	11.8.22	ND	10.09	ND				6291.10	



				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)	THIORNICSS	(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
		(leet B100)	(leet B100)		(leet B100)	(leet BTOC)	(leet AlvioL)	(leet AlviSL)
	4.21.11	ND	8.96	ND				6290.12
	6.21.11	ND	9.42	ND				6289.66
	9.22.11	ND	10.82	ND				6288.26
	12.13.11	ND	10.13	ND				6288.95
	3.20.12	ND	9.41	ND				6289.67
	6.19.12	ND	10.09	ND				6288.99
	9.19.12	ND	11.03	ND				6288.05
	12.17.12	ND	10.21	ND				6288.87
	3.15.13	ND	9.26	ND		8.03-18.03		6289.82
	6.27.13	ND	9.99	ND				6289.09
	10.21.13	ND	9.09	ND	18.03			6289.99
	12.12.13	ND	8.78	ND				6290.30
	4.17.14	ND	8.44	ND				6290.64
	11.6.14	ND	9.05	ND				6290.03
MW-12	5.28.15	ND	8.34	ND			6299.08	6290.74
1010 0 - 12	11.30.15	ND	8.44	ND			0233.00	6290.64
	5.25.16	ND	8.11	ND				6290.97
	11.07.16	ND	8.87	ND				6290.21
	5.26.17	ND	8.01	ND				6291.07
	12.06.17	ND	8.12	ND				6290.96
	5.30.18	ND	8.27	ND				6290.81
	11.01.18	ND	9.17	ND				6289.91
	9.20.19	ND	9.68	ND				6289.40
	1.31.20	ND	8.71	ND				6290.37
	5.8.20	ND	8.34	ND				6290.74
	11.11.20	ND	9.10	ND				6289.98
	5.28.21	ND	8.48	ND				6290.60
	11.22.21	ND	9.30	ND				6289.78
	5.19.22	ND	8.43	ND				6290.65
	11.8.22	ND	7.48	ND				6291.60



				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
				THICKHESS			(foot AMCL)	
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	9.07	ND				6289.20
	6.21.11	ND	9.51	ND				6288.76
	9.22.11	ND	10.15	ND				6288.12
	12.13.11	ND	9.59	ND				6288.68
	3.20.12	ND	9.35	ND				6288.92
	6.19.12	ND	10.09	ND				6288.18
	9.19.12	ND	10.29	ND				6287.98
	12.17.12	ND	9.47	ND				6288.80
	3.15.13	ND	9.11	ND		7.90-17.90		6289.16
	6.27.13	ND	9.94	ND	17.90			6288.33
	10.21.13	ND	8.91	ND				6289.36
	12.12.13	ND	8.57	ND				6289.70
	4.17.14	ND	8.39	ND				6289.88
	11.6.14	ND	8.83	ND				6289.44
MW-13	5.28.15	ND	8.32	ND			6298.27	6289.95
10100-13	11.30.15	ND	8.21	ND				6290.06
	5.25.16	ND	8.01	ND				6290.26
	11.07.16	ND	8.67	ND				6289.60
	5.26.17	ND	7.83	ND				6290.44
	12.06.17	ND	7.90	ND				6290.37
	5.30.18	ND	8.08	ND				6290.19
	11.01.18	ND	8.84	ND	1			6289.43
	9.20.19	ND	9.36	ND				6288.91
	1.31.20	ND	8.40	ND				6289.87
	5.11.20	ND	8.17	ND				6290.10
	11.11.20	ND	8.82	ND				6289.45
	5.28.21	ND	8.29	ND				6289.98
	11.22.21	ND	8.93	ND				6289.34
	5.19.22	ND	8.18	ND				6290.09
	11.8.22	ND	7.24	ND				6291.03



Well I.D.	Date	Depth to	Depth to	Product Product	Total Depth of	Screen	TOC Elevation	Groundwater
		Product	Water	Thickness	Well	Interval		Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	12.54	ND				6288.66
	6.21.11	ND	12.88	ND				6288.32
	9.22.11	ND	13.53	ND				6287.67
	12.13.11	ND	13.11	ND				6288.09
	3.20.12	ND	12.80	ND				6288.40
	6.19.12	ND	13.42	ND				6287.78
	9.19.12	ND	13.70	ND				6287.50
	12.17.12	ND	12.93	ND				6288.27
	3.15.13	ND	12.55	ND				6288.65
	6.27.13	ND	13.26	ND				6287.94
	10.22.13	ND	12.39	ND				6288.81
	12.12.13	ND	12.06 ND	6289.14				
	4.18.14	ND	11.79	ND				6289.41
	11.6.14		6288.97					
MW-14	5.28.15	ND	11.67	ND	18.88	8.88-18.88	6301.20	6289.53
10100-14	11.30.15	ND	11.62	ND	10.00	0.00-10.00	0301.20	6289.58
	5.25.16	ND	11.35	ND				6289.85
	11.07.16	ND	12.09	ND				6289.11
	5.26.17	ND	11.24	ND				6289.96
	12.06.17	ND	11.27	ND				6289.93
	5.30.18	ND	11.36	ND				6289.84
	11.01.18	ND	12.23	ND				6288.97
	9.20.19	ND	12.68	ND				6288.52
	1.31.20	ND	11.78	ND				6289.42
	5.11.20	ND	11.54	ND				6289.66
	11.11.20	ND	12.19	ND				6289.01
	5.28.21	ND	11.65	ND				6289.55
	11.22.21	ND	12.29	ND				6288.91
	5.19.22	ND	11.57	ND				6289.63
	11.8.22	ND	10.60	ND				6290.60



				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	12.06	ND				6287.83
	6.21.11	ND	12.26	ND				6287.63
	9.22.11	ND	12.57	ND				6287.32
	12.13.11	ND	12.28	ND				6287.61
	3.20.12	ND	12.24	ND				6287.65
	6.19.12	ND	12.71	ND				6287.18
	9.19.12	ND	12.80	ND				6287.09
	12.17.12	ND	11.90	ND				6287.99
	3.15.13	ND	11.80	ND				6288.09
	6.27.13	ND	12.37	ND				6287.52
	10.21.13	ND	11.32	ND				6288.57
	12.12.13	ND	10.92	ND				6288.97
	4.17.14	ND 10.76 ND		6289.13				
	11.6.14	ND	10.99	ND				6288.90
MW-16	5.28.15	ND	10.56	ND	18.01	8.01-18.01	6299.89	6289.33
10100-10	11.30.15	ND	10.39	ND	10.01	0.01-10.01	0299.09	6289.50
	5.25.16	ND	10.10	ND				6289.79
	11.07.16	ND	10.86	ND				6289.03
	5.26.17	ND	10.02	ND				6289.87
	12.06.17	ND	10.01	ND				6289.88
	5.30.18	ND	10.11	ND				6289.78
	11.01.18	ND	11.02	ND				6288.87
	9.20.19	ND	11.35	ND				6288.54
	1.31.20	ND	10.60	ND				6289.29
	5.11.20	ND	10.32	ND				6289.57
	11.11.20	ND	10.96	ND				6288.93
	5.28.21	ND	10.36	ND				6289.53
	11.22.21 <sup>A</sup>	ND	11.57	ND				6288.32
	5.19.22	ND	10.17	ND				6289.72
	11.8.22	ND	9.28	ND				6290.61

### **ENSOLUM**

				DWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	9.90	ND				6288.67
	6.21.11	ND	9.56	ND				6289.01
	9.22.11	ND	10.83	ND				6287.74
	12.13.11	ND	10.31	ND				6288.26
	3.20.12	ND	10.12	ND				6288.45
	6.19.12	ND	10.81	ND				6287.76
	9.19.12	ND	10.95	ND				6287.62
	12.17.12	ND	10.13	ND				6288.44
	3.15.13	ND	9.85	ND				6288.72
	6.27.13	ND	10.62	ND				6287.95
	10.21.13	ND	9.61	ND				6288.96
	12.12.13	ND	9.28	ND				6289.29
	4.17.14	ND	9.13	ND				6289.44
	11.6.14	ND	9.47	ND				6289.10
MW-17	5.28.15	ND	9.00	ND	18.16	8.16-18.16	6298.57	6289.57
10100-17	11.30.15	ND	8.87	ND	10.10	0.10-10.10	0290.37	6289.70
	5.25.16	ND	8.65	ND				6289.92
	11.07.16	ND	9.32	ND				6289.25
	5.26.17	ND	8.56	ND				6290.01
	12.06.17	ND	8.52	ND				6290.05
	5.30.18	ND	8.68	ND				6289.89
	11.01.18	ND	9.48	ND				6289.09
	9.20.19	ND	9.97	ND				6288.60
	1.31.20	ND	9.05	ND				6289.52
	5.11.20	ND	8.83	ND				6289.74
	11.11.20	ND	9.45	ND				6289.12
	5.28.21	ND	8.91	ND				6289.66
	11.22.21	ND	9.56	ND				6289.01
	5.19.22	ND	8.81	ND				6289.76
	11.8.22	ND	7.82	ND				6290.75



			GROUN	DWATER ELEV	ATIONS			
Well I.D.	Date	Depth to	Depth to	Product	Total Depth of		TOC Elevation	Groundwater
		Product	Water	Thickness	Well	Interval		Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	3.20.12	ND	16.60	ND				6288.17
	6.19.12	ND	17.42	ND				6287.35
	9.19.12	ND	17.45	ND				6287.32
	12.17.12	ND	16.73	ND				6288.04
	3.15.13		Blockage					Blockage
	6.27.13		Blockage					Blockage
	10.22.13		Blockage					Blockage
	12.12.13		Blockage					Blockage
	4.17.14		Blockage					Blockage
	11.6.14		Blockage					Blockage
	5.28.15		Blockage					Blockage
	11.30.15		Blockage					Blockage
MW-18	5.25.16		Blockage		NA	NA	6304.77	Blockage
10100-10	11.07.16		Blockage	_	INA	INA	0304.77	Blockage
	5.26.17	ND	15.12	ND				6289.65
	12.06.17	ND	15.31	ND				6289.46
	5.30.18		Blockage					Blockage
	11.01.18		Blockage					Blockage
	9.20.19		Blockage					Blockage
	1.31.20		Blockage					Blockage
	5.8.20		Blockage					Blockage
	11.11.20		Blockage					Blockage
	5.28.21		Blockage					Blockage
	11.22.21		Blockage		]			Blockage
	5.19.22		Blockage					Blockage
	11.8.22		Blockage					Blockage



				IDWATER ELEV				
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	3.20.12	ND	15.69	ND				6288.11
	6.19.12 <sup>B</sup>	16.25	16.32	0.07				6287.52
	9.19.12 <sup>B</sup>	16.47	16.49	0.02				6287.32
	12.17.12	ND	15.91	ND				6287.89
	3.15.13	ND	15.38	ND				6288.42
	6.27.13	ND	16.19	ND				6287.61
	10.22.13	ND	15.13	ND				6288.67
	12.12.13	ND	14.78	ND				6289.02
	4.18.14	ND	14.68	ND				6289.12
	11.6.14	ND	14.99	ND				6288.81
	5.28.15	ND	14.60	ND				6289.20
	11.30.15	ND	14.38	ND				6289.42
MW-19	5.25.16	ND	14.28	ND	23.22	13.22-23.22	6303.80	6289.52
10100-19	11.07.16	ND	14.83	ND	23.22	13.22-23.22	0303.80	6288.97
	5.26.17	ND	14.20	ND				6289.60
	12.06.17	ND	14.08	ND				6289.72
	5.30.18	ND	14.27	ND				6289.53
	11.01.18	ND	15.00	ND				6288.80
	9.20.19	ND	15.47	ND				6288.33
	1.31.20	ND	14.56	ND				6289.24
	5.11.20	ND	14.40	ND				6289.40
	11.11.20	ND	14.98	ND				6288.82
	5.28.21	ND	14.53	ND				6289.27
	11.22.21	ND	15.05	ND				6288.75
	5.19.22	ND	14.40	ND				6289.40
	11.8.22	ND	13.48	ND				6290.32



Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	3.20.12	ND	25.82	ND				6286.77
	6.19.12	ND	26.30	ND				6286.29
	9.19.12	ND	26.31	ND				6286.28
	12.17.12	ND	25.42	ND				6287.17
	3.15.13	ND	25.38	ND				6287.21
	6.27.13	ND	26.11	ND				6286.48
	10.22.13	ND	24.98	ND				6287.61
	12.12.13	ND	24.57	ND				6288.02
	4.17.14	ND	24.66	ND				6287.93
	11.6.14	ND	24.81	ND				6287.78
	5.28.15	ND	24.80	ND				6287.79
	11.30.15	ND	24.15	ND				6288.44
MW-20	5.25.16	ND	24.28	ND	30.51	20.51-30.51	6312.59	6288.31
10100-20	11.07.16	ND	24.48	ND	30.51	20.51-30.51	0312.59	6288.11
	5.26.17	ND	24.37	ND				6288.22
	12.06.17	ND	23.95	ND				6288.64
	5.30.18	ND	24.29	ND				6288.30
	11.01.18	ND	24.69	ND				6287.90
	9.20.19	ND	25.35	ND				6287.24
	1.31.20	ND	24.26	ND				6288.33
	5.11.20	ND	24.30	ND				6288.29
	11.11.20	ND	24.73	ND				6287.86
	5.28.21	ND	24.43	ND				6288.16
	11.22.21	ND	24.70	ND				6287.89
	5.19.22	ND	24.17	ND				6288.42
	11.8.22	ND	23.40	ND				6289.19

BTOC - below top of casing

TOC - top of casing

Basis of elevation: As measured at set temporary bench mark (elevation = 6296.14'), as indicated by the professional surveyor.

NA - Not Available

ND - Not Detected

<sup>\* -</sup> corrected for presence of phase-sepated hydrocarbon using a site-specific density correction factor of 0.63. Groundwater elevations at each well are listed in feet above mean sea level (AMSL) as measured from the TOC.

<sup>&</sup>lt;sup>A</sup> - Suspected misgauge.

<sup>&</sup>lt;sup>B</sup> - No visual verification. May not be hydrocarbon.



### APPENDIX D

Laboratory Data Sheets & Chain of Custody Documentation



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

May 26, 2022

Kyle Summers
Ensolum, LLC
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603

FAX:

RE: Lateral K 51 2010 OrderNo.: 2205930

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/20/2022 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

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 5/26/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum, LLC Client Sample ID: MW-11

 Project:
 Lateral K 51 2010
 Collection Date: 5/19/2022 10:05:00 AM

 Lab ID:
 2205930-001
 Matrix: AQUEOUS
 Received Date: 5/20/2022 7:05:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: BRM
Benzene	ND	1.0	μg/L	1	5/21/2022 5:25:00 PM	C88182
Toluene	ND	1.0	μg/L	1	5/21/2022 5:25:00 PM	C88182
Ethylbenzene	ND	1.0	μg/L	1	5/21/2022 5:25:00 PM	C88182
Xylenes, Total	ND	2.0	μg/L	1	5/21/2022 5:25:00 PM	C88182
Surr: 4-Bromofluorobenzene	96.6	70-130	%Rec	1	5/21/2022 5:25:00 PM	C88182

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

Page 1 of 9

**CLIENT:** Ensolum, LLC

### **Analytical Report**

Lab Order **2205930**Date Reported: **5/26/2022** 

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-4

**Project:** Lateral K 51 2010 **Collection Date:** 5/19/2022 10:35:00 AM

**Lab ID:** 2205930-002 **Matrix:** AQUEOUS **Received Date:** 5/20/2022 7:05:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	: BRM
Benzene	ND	1.0	μg/L	1	5/21/2022 6:24:00 PM	C88182
Toluene	ND	1.0	μg/L	1	5/21/2022 6:24:00 PM	C88182
Ethylbenzene	ND	1.0	μg/L	1	5/21/2022 6:24:00 PM	C88182
Xylenes, Total	3.6	2.0	μg/L	1	5/21/2022 6:24:00 PM	C88182
Surr: 4-Bromofluorobenzene	92.4	70-130	%Rec	1	5/21/2022 6:24:00 PM	C88182

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

Page 2 of 9

**CLIENT:** Ensolum, LLC

### **Analytical Report**

Lab Order **2205930**Date Reported: **5/26/2022** 

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-12

 Project:
 Lateral K 51 2010
 Collection Date: 5/19/2022 11:10:00 AM

 Lab ID:
 2205930-003
 Matrix: AQUEOUS
 Received Date: 5/20/2022 7:05:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 1.0 μg/L 5/21/2022 6:44:00 PM C88182 Toluene ND 1.0 μg/L 1 5/21/2022 6:44:00 PM C88182 Ethylbenzene ND 1.0 μg/L 5/21/2022 6:44:00 PM C88182 Xylenes, Total ND 2.0 μg/L 1 5/21/2022 6:44:00 PM C88182 Surr: 4-Bromofluorobenzene 95.5 70-130 %Rec 5/21/2022 6:44:00 PM C88182

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

Page 3 of 9

Date Reported: 5/26/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum, LLC Client Sample ID: MW-1

 Project:
 Lateral K 51 2010
 Collection Date: 5/19/2022 11:30:00 AM

 Lab ID:
 2205930-004
 Matrix: AQUEOUS
 Received Date: 5/20/2022 7:05:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: BRM
Benzene	ND	1.0	μg/L	1	5/21/2022 7:03:00 PM	C88182
Toluene	ND	1.0	μg/L	1	5/21/2022 7:03:00 PM	C88182
Ethylbenzene	ND	1.0	μg/L	1	5/21/2022 7:03:00 PM	C88182
Xylenes, Total	ND	2.0	μg/L	1	5/21/2022 7:03:00 PM	C88182
Surr: 4-Bromofluorobenzene	95.7	70-130	%Rec	1	5/21/2022 7:03:00 PM	C88182

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

Page 4 of 9

Date Reported: 5/26/2022

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum, LLC Client Sample ID: MW-2

 Project:
 Lateral K 51 2010
 Collection Date: 5/19/2022 12:05:00 PM

 Lab ID:
 2205930-005
 Matrix: AQUEOUS
 Received Date: 5/20/2022 7:05:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 1.0 μg/L 5/21/2022 7:23:00 PM C88182 Toluene ND 1.0 μg/L 1 5/21/2022 7:23:00 PM C88182 Ethylbenzene ND 1.0 μg/L 5/21/2022 7:23:00 PM C88182 Xylenes, Total ND 2.0 μg/L 5/21/2022 7:23:00 PM C88182 1 Surr: 4-Bromofluorobenzene 90.5 70-130 %Rec 5/21/2022 7:23:00 PM C88182

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

Page 5 of 9

Date Reported: 5/26/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum, LLC Client Sample ID: MW-3

 Project:
 Lateral K 51 2010
 Collection Date: 5/19/2022 12:30:00 PM

 Lab ID:
 2205930-006
 Matrix: AQUEOUS
 Received Date: 5/20/2022 7:05:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analyst	: BRM
Benzene	ND	1.0	μg/L	1	5/21/2022 7:42:00 PM	C88182
Toluene	ND	1.0	μg/L	1	5/21/2022 7:42:00 PM	C88182
Ethylbenzene	ND	1.0	μg/L	1	5/21/2022 7:42:00 PM	C88182
Xylenes, Total	ND	2.0	μg/L	1	5/21/2022 7:42:00 PM	C88182
Surr: 4-Bromofluorobenzene	96.0	70-130	%Rec	1	5/21/2022 7:42:00 PM	C88182

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

Page 6 of 9

Date Reported: 5/26/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum, LLC Client Sample ID: MW-13

 Project:
 Lateral K 51 2010
 Collection Date: 5/19/2022 1:00:00 PM

 Lab ID:
 2205930-007
 Matrix: AQUEOUS
 Received Date: 5/20/2022 7:05:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: BRM
Benzene	ND	1.0	μg/L	1	5/21/2022 8:02:00 PM	C88182
Toluene	ND	1.0	μg/L	1	5/21/2022 8:02:00 PM	C88182
Ethylbenzene	ND	1.0	μg/L	1	5/21/2022 8:02:00 PM	C88182
Xylenes, Total	ND	2.0	μg/L	1	5/21/2022 8:02:00 PM	C88182
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	5/21/2022 8:02:00 PM	C88182

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

Page 7 of 9

Date Reported: 5/26/2022

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum, LLC Client Sample ID: MW-17

 Project:
 Lateral K 51 2010
 Collection Date: 5/19/2022 1:25:00 PM

 Lab ID:
 2205930-008
 Matrix: AQUEOUS
 Received Date: 5/20/2022 7:05:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 1.0 μg/L 5/21/2022 8:22:00 PM C88182 Toluene ND 1.0 μg/L 1 5/21/2022 8:22:00 PM C88182 Ethylbenzene ND 1.0 μg/L 5/21/2022 8:22:00 PM C88182 Xylenes, Total ND 2.0 μg/L 1 5/21/2022 8:22:00 PM C88182 Surr: 4-Bromofluorobenzene 98.5 70-130 %Rec 5/21/2022 8:22:00 PM C88182

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

Page 8 of 9

### **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2205930

26-May-22

Client: Ensolum, LLC
Project: Lateral K 51 2010

Sample ID: 100ng btex lcs	SampT	SampType: LCS TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSW	Batch	n ID: <b>C8</b>	8182	RunNo: 88182						
Prep Date:	Analysis D	Date: 5/2	21/2022	SeqNo: <b>3126102</b> Units: μg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.1	80	120			
Toluene	19	1.0	20.00	0	96.8	80	120			
Ethylbenzene	20	1.0	20.00	0	98.0	80	120			
Xylenes, Total	59	2.0	60.00	0.00 0 97.7 80 120						
Surr: 4-Bromofluorobenzene	19		20.00		96.8	70	130			

Sample ID: mb	SampT	уре: МЕ	BLK	Tes	tCode: <b>EF</b>	PA Method	8021B: Volatil	es		
Client ID: PBW	Batch	ID: <b>C8</b>	8182	F	RunNo: 88	3182				
Prep Date:	Analysis D	ate: <b>5/</b> 2	21/2022	9	SeqNo: 31	126103	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	19		20.00		96.9	70	130			

Sample ID: 2205930-001ams	SampT	ype: MS	3	Tes	tCode: <b>EF</b>	PA Method	8021B: Volati	les		•
Client ID: MW-11	Batch	n ID: <b>C8</b>	8182	F	RunNo: 88	3182				
Prep Date:	Analysis D	oate: 5/2	21/2022	9	SeqNo: 31	126113	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		93.7	70	130			

Sample ID: 2205930-001amsd	SampT	уре: <b>МЅ</b>	D	Tes	tCode: EF	PA Method	8021B: Volatil	es		
Client ID: MW-11	Batch	n ID: <b>C8</b> 8	8182	F	RunNo: 88	3182				
Prep Date:	Analysis D	Date: 5/2	21/2022	5	SeqNo: 31	126114	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	80	120	4.75	20	
Toluene	20	1.0	20.00	0	97.5	80	120	4.95	20	
Ethylbenzene	20	1.0	20.00	0	99.2	80	120	3.98	20	
Xylenes, Total	60	2.0	60.00	0	99.9	80	120	3.20	20	
Surr: 4-Bromofluorobenzene	18		20.00		91.8	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 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 9 of 9



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

### Sample Log-In Check List

Client Name: ENSOLUM	Work Order N	umber: 2205930		RcptNo: 1	•
Received By: Juan Rojas	5/20/2022 7:05:	00 AM	Hansay.		
Completed By: Tracy Casar	rubias 5/20/2022 8:16:	48 AM	•		
950 25 0 0	120/22				
Chain of Custody					
1. Is Chain of Custody complete	9?	Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered	d?	Courier			
<u>Log In</u>					
3. Was an attempt made to coo	I the samples?	Yes 🗸	No 🗌	NA 🗆	
4. Were all samples received at	a temperature of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗆	
5. Sample(s) in proper contained	r(s)?	Yes 🗸	No 🗌		
6. Sufficient sample volume for i	ndicated test(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and	d ONG) properly preserved?	Yes 🗸	No 🗌		
8. Was preservative added to bo	ttles?	Yes	No 🗸	NA 🗆	
9. Received at least 1 vial with h	eadspace <1/4" for AQ VOA?	Yes	No 🗌	NA 🗹	
10. Were any sample containers	received broken?	Yes	No 🔽	# of preserved	
11. Does paperwork match bottle		Yes 🗹	No 🗆	bottles checked for pH:	
(Note discrepancies on chain 2. Are matrices correctly identified				(<2 or >12 unl Adjusted?	ess noted)
[3] Is it clear what analyses were		Yes ✓ Yes ✓	No 🗌	Adjusted	
14. Were all holding times able to (If no, notify customer for auth	be met?	Yes 🗸	No 🗆	Checked by: Jn 5	120/22
Special Handling (if applic			2		
15. Was client notified of all discr		Yes	No 🗌	NA 🗸	
Person Notified:	Da	ate:			
By Whom:	Vi	P	Phone   Fax	☐ In Person	
Regarding:					
Client Instructions:				CONTRACTOR OF THE CONTRACTOR O	
16. Additional remarks:					
17. <u>Cooler Information</u> Cooler No Temp °C (	Condition   Seal Intact   Seal No	o Seal Dato	Signed Du		
	ood Yes	o Seal Date	Signed By		

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107 Analysis Request	CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> 8260 (VOA) 8270 (Semi-VOA) Total Coliform (Present/Absent)	8			bage 12/01/2012
HALL ANAL www.ha 4901 Hawkins NE Tel. 505-345-3975	TPH:8015D(GRO / DRO / MRO)  EDB (Method 504.1)  PAHs by 8310 or 8270SIMS  RCRA 8 Metals				Remarks: possibility. Any sub-contracted data
(2010)	No   No   No   No   No   No   No   No	2 ~	\$00 \$00 \$00 \$00	003 X 300 X	Date Time Re Date Time Date Time  S. This serves as notice of this pos
Turn-Around Time:	Project Manager:  Sampler: On Ice: A Yes D No  # of Coolers: A Cooler Tempinating cry: A Cooler	1-		7	Received by: Via:  Received by: Via:  Received by: Via:  Owner S  Intracted to other accredited laboratories
S. Richard Siber	ששער הקסיפא בקשש בשיע בשיע בשיע בשיע בשיע בשיע בשיע בש	MW-4	WW-12 WW-1 NW-2	MW-13 V MW-17	Time: Relinquished by:  Received by: Via: Date Time Remarks:  Time: Relinquished by: Nia: Date Time Remarks:  Received by: Via: Date Time Remarks:  Time: Relinquished by: Nia: Date Time Received by: Via: Date Time Time Time This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
Chain-of-Cu Client: Ense lucy Mailing Address: Color	email or Fax#:  QA/QC Package:  ☐ Standard  Accreditation:  ☐ NELAC  ☐ EDD (Type)  ☐ EDD (Type)	4 2	11:30 5/19/20 W	13:00.5/19/2 W	Date: Time: Relinq



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

June 01, 2022

Kyle Summers Ensolum 606 S Rio Grande Ste A Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral K 51 2010 OrderNo.: 2205992

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/21/2022 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

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 6/1/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Ensolum Client Sample ID: MW-16

**Project:** Lateral K 51 2010 Collection Date: 5/20/2022 9:15:00 AM 2205992-001 Lab ID: Matrix: AQUEOUS Received Date: 5/21/2022 9:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: CCM
Benzene	ND	1.0	μg/L	1	5/25/2022 4:33:00 PM	SL88251
Toluene	ND	1.0	μg/L	1	5/25/2022 4:33:00 PM	SL88251
Ethylbenzene	ND	1.0	μg/L	1	5/25/2022 4:33:00 PM	SL88251
Xylenes, Total	ND	1.5	μg/L	1	5/25/2022 4:33:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	96.7	70-130	%Rec	1	5/25/2022 4:33:00 PM	SL88251
Surr: Dibromofluoromethane	110	70-130	%Rec	1	5/25/2022 4:33:00 PM	SL88251
Surr: Toluene-d8	93.9	70-130	%Rec	1	5/25/2022 4:33:00 PM	SL88251

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
- % 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
- RL Reporting Limit

Page 1 of 5

**CLIENT:** Ensolum

# Analytical Report Lab Order 2205992

Date Reported: 6/1/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-14

**Project:** Lateral K 51 2010 **Collection Date:** 5/20/2022 9:50:00 AM

**Lab ID:** 2205992-002 **Matrix:** AQUEOUS **Received Date:** 5/21/2022 9:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	:: CCM
Benzene	ND	1.0	μg/L	1	5/25/2022 4:56:00 PM	SL88251
Toluene	ND	1.0	μg/L	1	5/25/2022 4:56:00 PM	SL88251
Ethylbenzene	ND	1.0	μg/L	1	5/25/2022 4:56:00 PM	SL88251
Xylenes, Total	ND	1.5	μg/L	1	5/25/2022 4:56:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	99.4	70-130	%Rec	1	5/25/2022 4:56:00 PM	SL88251
Surr: Dibromofluoromethane	110	70-130	%Rec	1	5/25/2022 4:56:00 PM	SL88251
Surr: Toluene-d8	94.9	70-130	%Rec	1	5/25/2022 4:56:00 PM	SL88251

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

Page 2 of 5

### **Analytical Report**

Lab Order **2205992**Date Reported: **6/1/2022** 

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Ensolum **Client Sample ID:** MW-20

 Project:
 Lateral K 51 2010
 Collection Date: 5/20/2022 10:25:00 AM

 Lab ID:
 2205992-003
 Matrix: AQUEOUS
 Received Date: 5/21/2022 9:45:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: CCM
Benzene	ND	1.0	μg/L	1	5/25/2022 5:19:00 PM	SL88251
Toluene	ND	1.0	μg/L	1	5/25/2022 5:19:00 PM	SL88251
Ethylbenzene	ND	1.0	μg/L	1	5/25/2022 5:19:00 PM	SL88251
Xylenes, Total	ND	1.5	μg/L	1	5/25/2022 5:19:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	96.5	70-130	%Rec	1	5/25/2022 5:19:00 PM	SL88251
Surr: Dibromofluoromethane	110	70-130	%Rec	1	5/25/2022 5:19:00 PM	SL88251
Surr: Toluene-d8	95.0	70-130	%Rec	1	5/25/2022 5:19:00 PM	SL88251

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

Page 3 of 5

**CLIENT:** Ensolum

### **Analytical Report**

Lab Order **2205992**Date Reported: **6/1/2022** 

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-19

 Project:
 Lateral K 51 2010
 Collection Date: 5/20/2022 10:55:00 AM

 Lab ID:
 2205992-004
 Matrix: AQUEOUS
 Received Date: 5/21/2022 9:45:00 AM

**Analyses** Result **RL Qual Units DF** Date Analyzed **Batch EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: CCM Benzene 160 5.0 μg/L 5/25/2022 5:42:00 PM SL88251 Toluene ND 5.0 μg/L 5 5/25/2022 5:42:00 PM SL88251 54 Ethylbenzene 5.0 μg/L 5 5/25/2022 5:42:00 PM SL88251 Xylenes, Total 29 7.5 μg/L 5 5/25/2022 5:42:00 PM SL88251 Surr: 1,2-Dichloroethane-d4 92.4 70-130 %Rec 5/25/2022 5:42:00 PM SL88251 Surr: Dibromofluoromethane 104 70-130 %Rec 5 5/25/2022 5:42:00 PM SL88251 Surr: Toluene-d8 99.2 70-130 %Rec 5/25/2022 5:42:00 PM SL88251

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

Page 4 of 5

### **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

2205992 01-Jun-22

WO#:

Client: Ensolum

**Project:** Lateral K 51 2010

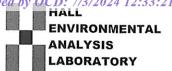
Sample ID: 100ng Ics	SampT	ype: LC	s	Tes	stCode: <b>EF</b>	PA Method	8260: Volatile	s Short Li	st	
Client ID: LCSW	Batch	n ID: SL	88251	F	RunNo: 88	3251				
Prep Date:	Analysis D	oate: 5/2	25/2022	5	SeqNo: 31	130010	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.8	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130			
Surr: Toluene-d8	9.6		10.00		96.5	70	130			

Sample ID: MB	SampT	ype: ME	BLK	Tes	tCode: <b>EF</b>	PA Method	8260: Volatile	s Short Li	ist	
Client ID: PBW	Batch	n ID: SL	88251	F	RunNo: 88	3251				
Prep Date:	Analysis D	oate: 5/2	25/2022	9	SeqNo: 31	130011	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	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.5		10.00		95.4	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 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 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

### Sample Log-In Check List

Client Name: ENSOLUM Wo	ork Order Number: 2205992		RcptNo: 1	
Received By: Tracy Casarrubias 5/21/	2022 9:45:00 AM			
	2022 8:25:16 AM			
Reviewed By: 115/23/22				
Chain of Custody				
1. Is Chain of Custody complete?	Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?	Courier			
<u>Log In</u>	_			
3. Was an attempt made to cool the samples?	Yes 🗸	No 🗌	NA 🗌	
4. Were all samples received at a temperature of >0°	C to 6.0°C Yes ✓	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?	Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated test(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) properly prese	rved? Yes	No 🗌		
8. Was preservative added to bottles?	Yes	No 🗸	NA 🗌	
9. Received at least 1 vial with headspace <1/4" for AC	Q VOA? Yes	No 🗌	NA 🗹	
10. Were any sample containers received broken?	Yes	No 🗸	# of preserved	/
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗸	No 🗆	bottles checked for pH: (<2 or ≥12 u	nless noted)
12. Are matrices correctly identified on Chain of Custody	y? Yes ✓	No 🗌	Adjusted?	,
13. Is it clear what analyses were requested?	Yes 🗹	No 🗌	/ / / 0	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🔽	No 🗆	Checked by: KIC	2.73.
Special Handling (if applicable)				
15. Was client notified of all discrepancies with this order	er? Yes	No 🗌	NA 🗹	
Person Notified:	Date:			
By Whom:		hone  Fax	☐ In Person	
Regarding:				
Client Instructions:			THE RESIDENCE OF THE PARTY OF T	
16. Additional remarks:				
17. Cooler Information Cooler No Temp °C Condition Seal Intac 1 3.8 Good Not Present		Signed By		

Chain-of-Custody Record	Turn-Around Time:	ïme:							Receiv
Client:	A Charles			H	HALL	S		ENVIRONMENT/	
Lu solum, CCC	Project Name:	_ rusn			ALY	ANALYSIS		ABORATOR	>
				W	w.haller	vironme	www.hallenvironmental.com	Ε	CD:
COG S. RisGrande, Suit	4	(1 K-2) (2010)	4901	4901 Hawkins NE	1	Ibuquer	que, NN	Albuquerque, NM 87109	7/3/
Aztec, NM 87410	Project #:		Tel.	505-345-3975		Fax 50	505-345-4107	4107	/202·
Phone #:	65A1	226010			Ana		Request		4 12
email or Fax#: KSwmers@engolum. Cam	Project Manage	er:					(ţı		33
ige:			NR(				19sq/	-	:21 P
☐ Standard ☐ Level 4 (Full Validation)	on) T	ummers	0				√∫l∟		PM
Accreditation: ☐ Az Compliance ☐ NEI AC ☐ Other	Sampler:	- Daniell	40 / O	(1.40					
ype)	olers:	3	ЭВЭ	)g p	gle				
	Cooler Temp(including CF):	cluding CF): 3.7 to 1:3.8 (°C)	MTI	letho	.əW s	(AO			
Date Time Matrix Sample Name	Container P Type and # T	Preservative 720592	X3TEX / 08:H9T	9081 P6 M) BDE d sHA9	SCRA 8	v) 0928	S) 07S8		
5/20/21 9:15 W W-16	*	(1)				3			
5/20/21 9:50 W NW-14		700	(×						
2/2/2 10:25 W NW - 20		2003	X						
5404 10:55 W MW - 19	60	000	X						
	4						iya.		
52/21/23  Date: Time: Relinquished by: 5/26/22 (147)  Muctual Lagrange 10.2	Received by: Received by:		Remarks:	18:11 to	3	M	Mosh		Page 135 of .
If necessary, samples submitted to Hall Environmental may be supcontracted to other accredited laborateries.	e subconfracted to other accr	edited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	his possibility. Any	sub-contracte	d data will l	e clearly n	otated on th	ne analytical report.	240



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

November 18, 2022

Kyle Summers
Ensolum
606 S Rio Grande Ste A
Aztec, NM 87410
TEL: (903) 821-5603

FAX

RE: Lateral K 51 2010 OrderNo.: 2211646

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/10/2022 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

andy

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-4

 Project:
 Lateral K 51 2010
 Collection Date: 11/8/2022 11:25:00 AM

 Lab ID:
 2211646-001
 Matrix: AQUEOUS
 Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	JR
Benzene	ND	1.0	μg/L	1	11/16/2022 4:52:00 PM	SL92645
Toluene	ND	1.0	μg/L	1	11/16/2022 4:52:00 PM	SL92645
Ethylbenzene	ND	1.0	μg/L	1	11/16/2022 4:52:00 PM	SL92645
Xylenes, Total	ND	1.5	μg/L	1	11/16/2022 4:52:00 PM	SL92645
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	11/16/2022 4:52:00 PM	SL92645
Surr: Dibromofluoromethane	107	70-130	%Rec	1	11/16/2022 4:52:00 PM	SL92645
Surr: Toluene-d8	89.8	70-130	%Rec	1	11/16/2022 4:52:00 PM	SL92645

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

Page 1 of 9

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-1

 Project:
 Lateral K 51 2010
 Collection Date: 11/8/2022 12:00:00 PM

 Lab ID:
 2211646-002
 Matrix: AQUEOUS
 Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: JR
Benzene	ND	1.0	μg/L	1	11/16/2022 5:20:37 PM	SL92645
Toluene	ND	1.0	μg/L	1	11/16/2022 5:20:37 PM	SL92645
Ethylbenzene	ND	1.0	μg/L	1	11/16/2022 5:20:37 PM	SL92645
Xylenes, Total	ND	1.5	μg/L	1	11/16/2022 5:20:37 PM	SL92645
Surr: 1,2-Dichloroethane-d4	113	70-130	%Rec	1	11/16/2022 5:20:37 PM	SL92645
Surr: Dibromofluoromethane	115	70-130	%Rec	1	11/16/2022 5:20:37 PM	SL92645
Surr: Toluene-d8	89.2	70-130	%Rec	1	11/16/2022 5:20:37 PM	SL92645

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 9

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-2

 Project:
 Lateral K 51 2010
 Collection Date: 11/8/2022 12:30:00 PM

 Lab ID:
 2211646-003
 Matrix: AQUEOUS
 Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: JR
Benzene	ND	1.0	μg/L	1	11/16/2022 5:49:14 PM	SL92645
Toluene	ND	1.0	μg/L	1	11/16/2022 5:49:14 PM	SL92645
Ethylbenzene	ND	1.0	μg/L	1	11/16/2022 5:49:14 PM	SL92645
Xylenes, Total	ND	1.5	μg/L	1	11/16/2022 5:49:14 PM	SL92645
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	11/16/2022 5:49:14 PM	SL92645
Surr: Dibromofluoromethane	108	70-130	%Rec	1	11/16/2022 5:49:14 PM	SL92645
Surr: Toluene-d8	89.6	70-130	%Rec	1	11/16/2022 5:49:14 PM	SL92645

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

Page 3 of 9

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-17

 Project:
 Lateral K 51 2010
 Collection Date: 11/8/2022 12:55:00 PM

 Lab ID:
 2211646-004
 Matrix: AQUEOUS
 Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: JR
Benzene	ND	1.0	μg/L	1	11/16/2022 6:17:49 PM	SL92645
Toluene	ND	1.0	μg/L	1	11/16/2022 6:17:49 PM	SL92645
Ethylbenzene	ND	1.0	μg/L	1	11/16/2022 6:17:49 PM	SL92645
Xylenes, Total	ND	1.5	μg/L	1	11/16/2022 6:17:49 PM	SL92645
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	11/16/2022 6:17:49 PM	SL92645
Surr: Dibromofluoromethane	106	70-130	%Rec	1	11/16/2022 6:17:49 PM	SL92645
Surr: Toluene-d8	89.4	70-130	%Rec	1	11/16/2022 6:17:49 PM	SL92645

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
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- L Reporting Limit

Page 4 of 9

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Ensolum Client Sample ID: MW-16

**Project:** Lateral K 51 2010 Collection Date: 11/8/2022 1:30:00 PM 2211646-005 Lab ID: Matrix: AQUEOUS Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: JR
Benzene	ND	1.0	μg/L	1	11/16/2022 6:46:27 PM	SL92645
Toluene	ND	1.0	μg/L	1	11/16/2022 6:46:27 PM	SL92645
Ethylbenzene	ND	1.0	μg/L	1	11/16/2022 6:46:27 PM	SL92645
Xylenes, Total	ND	1.5	μg/L	1	11/16/2022 6:46:27 PM	SL92645
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	1	11/16/2022 6:46:27 PM	SL92645
Surr: Dibromofluoromethane	108	70-130	%Rec	1	11/16/2022 6:46:27 PM	SL92645
Surr: Toluene-d8	89.5	70-130	%Rec	1	11/16/2022 6:46:27 PM	SL92645

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Limit

Page 5 of 9

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Ensolum Client Sample ID: MW-14

**Project:** Lateral K 51 2010 Collection Date: 11/8/2022 2:00:00 PM Lab ID: 2211646-006 Matrix: AQUEOUS Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: JR
Benzene	ND	1.0	μg/L	1	11/16/2022 7:15:02 PM	SL92645
Toluene	ND	1.0	μg/L	1	11/16/2022 7:15:02 PM	SL92645
Ethylbenzene	ND	1.0	μg/L	1	11/16/2022 7:15:02 PM	SL92645
Xylenes, Total	ND	1.5	μg/L	1	11/16/2022 7:15:02 PM	SL92645
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	11/16/2022 7:15:02 PM	SL92645
Surr: Dibromofluoromethane	111	70-130	%Rec	1	11/16/2022 7:15:02 PM	SL92645
Surr: Toluene-d8	89.5	70-130	%Rec	1	11/16/2022 7:15:02 PM	SL92645

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Limit

Page 6 of 9

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum Client Sample ID: MW-19

 Project:
 Lateral K 51 2010
 Collection Date: 11/8/2022 2:25:00 PM

 Lab ID:
 2211646-007
 Matrix: AQUEOUS
 Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: JR
Benzene	78	2.0	μg/L	2	11/16/2022 7:43:33 PM	SL92645
Toluene	ND	2.0	μg/L	2	11/16/2022 7:43:33 PM	SL92645
Ethylbenzene	34	2.0	μg/L	2	11/16/2022 7:43:33 PM	SL92645
Xylenes, Total	3.2	3.0	μg/L	2	11/16/2022 7:43:33 PM	SL92645
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	2	11/16/2022 7:43:33 PM	SL92645
Surr: Dibromofluoromethane	98.1	70-130	%Rec	2	11/16/2022 7:43:33 PM	SL92645
Surr: Toluene-d8	92.0	70-130	%Rec	2	11/16/2022 7:43:33 PM	SL92645

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 9

Date Reported: 11/18/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Ensolum Client Sample ID: MW-20

**Project:** Lateral K 51 2010 Collection Date: 11/8/2022 3:00:00 PM Lab ID: 2211646-008 Matrix: AQUEOUS Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: JR
Benzene	ND	1.0	μg/L	1	11/16/2022 8:12:03 PM	SL92645
Toluene	ND	1.0	μg/L	1	11/16/2022 8:12:03 PM	SL92645
Ethylbenzene	ND	1.0	μg/L	1	11/16/2022 8:12:03 PM	SL92645
Xylenes, Total	ND	1.5	μg/L	1	11/16/2022 8:12:03 PM	SL92645
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	1	11/16/2022 8:12:03 PM	SL92645
Surr: Dibromofluoromethane	110	70-130	%Rec	1	11/16/2022 8:12:03 PM	SL92645
Surr: Toluene-d8	87.2	70-130	%Rec	1	11/16/2022 8:12:03 PM	SL92645

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Limit

Page 8 of 9

## **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2211646** 

18-Nov-22

Client: Ensolum

**Project:** Lateral K 51 2010

Sample ID: 100ng lcs	SampType: <b>LCS</b>			Tes	TestCode: EPA Method 8260: Volatiles Short List					
Client ID: LCSW	Batch ID: <b>SL92645</b>			F	RunNo: <b>92645</b>					
Prep Date:	Analysis D	oate: 11	/16/2022	9	SeqNo: 3	332334	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.9	70	130			
Toluene	18	1.0	20.00	0	87.9	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.7	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.6	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	8.8		10.00		88.4	70	130			

Sample ID: mb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260: Volatile	es Short L	_ist	
Client ID: PBW	Batch	n ID: SL	92645	F	RunNo: 9	2645				
Prep Date:	Analysis D	ate: 11	1/16/2022	9	SeqNo: 3	332335	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	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.0	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	8.8		10.00		88.0	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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 9



### Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

## Sample Log-In Check List

Released to Imaging: 8/6/2024 3:47:11 PM

Client Name:	ENSOLUM		Work	Order Numl	oer: 221	1646		RcptNo:	1
Received By:	Juan Rojas	s	11/10/20	22 7:00:00	AM		Hum Say		
Completed By:	Tracy Casa		11/10/20	)22 12:22:5	1 PM				
	Ju uli								
Chain of Custo		•					ŧ8		
1. Is Chain of Cus		ete?			Yes	<b>V</b>	No 🗌	Not Present	
2. How was the sa					Cou	<u>rier</u>			
Log In									
Was an attempt	t made to c	ool the sampl	es?		Yes	V	No 🗌	na 🗆	
4. Were all sample	es received	at a temperal	ture of >0°C t	o 6.0°C	Yes	<b>V</b>	No 🗆	NA 🗆	
5. Sample(s) in pi	oper contai	ner(s)?			Yes	<b>✓</b>	No 🗆		
6. Sufficient samp	le volume fo	or indicated te	est(s)?		Yes	<b>V</b>	No 🗌		
7. Are samples (e	xcept VOA a	and ONG) pro	perly preserve	d?	Yes	<b>V</b>	No 🗌		
8. Was preservati	ve added to	bottles?			Yes		No 🗹	NA 🗆	
9. Received at lea	st 1 vial with	n headspace	<1/4" for AQ V	OA?	Yes		No 🗆	na 🗌	
10. Were any sam	ple containe	rs received b	roken?		Yes		No 🗹	# of preserved bottles checked	
11. Does paperwor (Note discrepar			)		Yes	<b>V</b>	No 🗌	for pH:	12 unless noted)
12. Are matrices co		-			Yes	<b>V</b>	No 🗆	Adjusted?	
3. Is it clear what	analyses we	ere requested	?		Yes	<b>V</b>	No 🗌		<b>.</b>
14. Were all holding (If no, notify cus	_				Yes	<b>V</b>	No 🗆	Checked by: TM	re min
Special Handlii							/		
15. Was client noti	fied of all di	screpancies v	vith this order?		Yes		No 🗆	NA 🗹	
Person N	lotified:			Date	: [				
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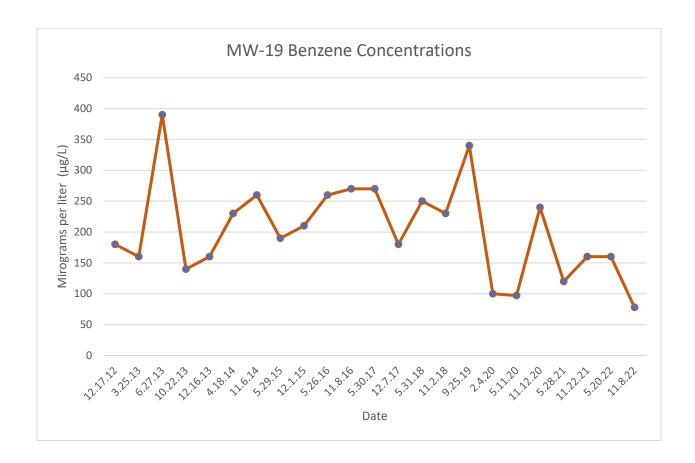
Received by OCD: 7/3/2024 12:33:21 PM

Chain-of-Custody Record	Turn-Around Time:	I HALL ENVIDONMENTAL
Client: The Salary CLO	X Standard   Rush	
	Project Name:	www.hallenvironmental.com
Mailing Address: 606 Rio Grands, Suitel	Lateral K-51 (2010)	4901 Hawkins NE - Albuquerque, NM 87109
811-118	Project #:	Tel. 505-345-3975 Fax 505-345-4107
	65A 1226010	Anal
email or Fax#: Ksummers@crsokuncery	Project Manager:	†O9
age:	7	oO⁴' a
Standard	Sampler	0 전 0 1) 2 2 7 0 5 구 . 도 0
Other	On Ice: D-Yes D No	08/86 504. 504. 8 10 8 30 8 10
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	Cooler Temp(including cr): 0.1-0.1(°C)	estice Meth yy 8: 8 Me 3r, 1 7c Meth
	Container Preservative HEAL No.	PH:80 081 P 081 P 20 (6 20 (7 20 (6 20 (6 20 (6)
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.  **Released to Imaging: 8/6/2024 3:47:11 PM**	ocontracted toother accredited laboratories. This serves as notice of this properties of the serves as notice of the serves as not t	This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

# ENSOLUM

# **APPENDIX E**

**Benzene Concentration Chart** 







ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS GP, LLC
(General Partner)

**ENTERPRISE PRODUCTS OPERATING LLC** 

July 1, 2024

Submitted online via OCD E-Permitting: https://www.apps.emnrd.nm.gov/OCD/OCDPermitting/default.aspx

Mr. Nelson Velez New Mexico Energy, Minerals & Natural Resources Department – Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

Submittal1:2023 Groundwater Monitoring Report (Ensolum, April 11, 2024)Submittal2:2022 Groundwater Monitoring Report (Ensolum, March 22, 2023)Submittal3:2021 Groundwater Monitoring Report (Ensolum, March 29, 2022)

**RE:** Enterprise Field Services, LLC

Lateral K-51 Pipeline Release (4/13/2010)

Rio Arriba Co., NM [S34 and 35, T26N R6W (36.4465° N, 107.4461° W)]

OCD RP: 3R-446; Stage 1 AP-130; Incident No. nAUTOFAB00318

Dear Mr. Velez:

Enterprise Products Operating LLC (Enterprise), on behalf of Enterprise Field Services, LLC, is pleased to submit to New Mexico Oil Conservation Department (OCD) one electronic copy (online via OCD E-Permitting) of the above-referenced documents (Submittal1, Submittal2, and Submittal3, collectively "Submittals") prepared by Ensolum, LLC (Ensolum). The Submittals are associated with the Enterprise Lateral K-51 release of natural gas condensate liquids that occurred on April 13, 2010 from a natural gas gathering pipeline, located in Rio Arriba County, New Mexico (the "Site"). Submittal1 summarizes on-site activities that occurred between January 1, 2023 and December 31, 2023 ("reporting period" for Submittal1), Submittal2 summarizes on-site activities conducted between January 1, 2022 and December 31, 2022 ("reporting period" for Submittal3), and Submittal3 summarizes on-site activities conducted between January 1, 2021 and December 31, 2021 ("reporting period" for Submittal3). During each reporting period, on-going groundwater monitoring and sampling (GWM&S) activities were continued to evaluate the magnitude and stability of the dissolved-phase hydrocarbon (DPH) plume in groundwater.

Data presented in the attached Submittals indicate that only the benzene concentrations in monitoring well MW-19 remain in excess of applicable New Mexico Water Quality Control Commission (NMWQCC) Groundwater Quality standards (GQS) and constituents of concern (COC) concentrations are generally stable and/or declining at the Site. Phase-separated hydrocarbon (PSH) has not been observed at the Site, with the exception of two anomalous events in 2012 (MW-19), which were not visually confirmed. The DPH plume is not currently delineated to the southwest of MW-19 due to an obstruction (silted in or collapsed) of MW-18; however, historical COC concentrations were all below laboratory detection limits for MW-18. Additionally, in comparing current COC data to historical data, the COC exceedances identified at MW-19 appear to be associated with another historical release source. COCs in the original release area have been below laboratory detection limits and/or applicable NMWQCC GQSs since November 2016, or earlier.

Based on the data contained within the attached Submittals, Enterprise plans to: 1) continue conducting semi-annual GWM&S events with annual sampling of monitoring wells MW-3 and MW-11 through MW-13 (as per OCD approval email dated June 8, 2020); 2) install a shallow recovery well up-gradient of monitoring well MW-19 to facilitate enhanced fluid recovery; 3) repair or replace monitoring well MW-18 as described in the *Stage 1 Abatement Plan* (Ensolum, revised May 22, 2019); 4) potentially conduct additional site-specific aquifer characterization; and, 5) prepare a *Stage 2 Abatement Plan*, if required, after concurrence that the *Stage 1 Abatement Plan* is deemed administratively complete.

Enterprise appreciates the OCD's continued assistance and guidance in bringing closure to this Site. Should you have any questions, comments, or concerns, or require additional information, please contact Scott Drewry via email (<a href="mailto:sdrewry@eprod.com">sdrewry@eprod.com</a>) or phone (713-381-5696), or our project consultant Kyle Summers (<a href="mailto:ksummers@ensolum.com">ksummers@ensolum.com</a>) with Ensolum.

Sincerely,

Jon E. Fields
Director, Environmental

cc: BLM, Farmington, NM – Mr. J. Nolan Craun <6251 College Blvd., Suite A, Farmington, NM 87402>

Landowner – Mr. Russell Luna < PO Box 753, Bloomfield, NM 87413-0753>

ec: Ensolum, Houston, TX – Mr. Kyle Summers < <u>ksummers@ensolum.com</u> >



## **2023 GROUNDWATER MONITORING REPORT**

## Property:

Lateral K-51 Pipeline Release (2010)

Unit Letter H of S34 and Unit Letter E of S35 T26N R6W Rio Arriba County, New Mexico

New Mexico EMNRD OCD RP No. 3RP-446
Abatement Plan No. 130
Incident ID No. nAUTOfAB000318

April 11, 2024

Ensolum Project No. 05A1226010

Prepared for:

**Enterprise Field Services, LLC** 

P.O. Box 4324 Houston, Texas 77210-4324 Attn: Mr. Peter Cain

Prepared by:

Review of the 2023 annual groundwater monitoring report: content satisfactory 1. Continue to conduct semi-annual

groundwater monitoring at the site, limiting the sampling frequency for wells MW-3, MW-11, MW-12, and MW-13 to an annual basis until COCs are

demonstrating to be below the WQCC human health

standards in Title 20 of the NMAC, then transition back to a quarterly schedule.

2. Proceed with plans to install a shallow recovery well upgradient of

Kyle Summanionitoring well MW-19 Senior Managingitheralepsistor

replace MW-18.
3. If aquifer testing is conducted, please notify OCD 4 business days in advance, before activity takes place.

4. Submit the 2024 annual report to OCD by April 1, 2025.

Kneet rechilly

Ranee Deechilly Project Manager

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consulta

606 South Rio Grande, Suite A | Aztec, NM 87410 | ensolum.com 4. Submit the 2024

### **Executive Summary**

This report documents the 2023 groundwater monitoring activities conducted at the Lateral K-51 Pipeline Release (2010) site, referred to hereinafter as the "Site". The Site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in Sections 34 and 35, Township 26 North, Range 6 West, in Rio Arriba County, New Mexico (NM).

On April 13, 2010, a release of natural gas condensate occurred from the Lateral K-51 pipeline. The initial site assessment identified concentrations of constituents of concern (COCs) in soil and groundwater above the applicable NM Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria and the NM Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs). Delineation and initial excavation activities conducted between June 2010 and March 2012 identified additional concentrations of COCs above the applicable NM EMNRD OCD closure criteria for soils and above the NM WQCC GQSs for groundwater. During 2011, in-situ chemical oxidation (ISCO) was performed in the immediate area of the release.

Quarterly and semi-annual groundwater monitoring was conducted from 2012 through 2014 and 2015 through 2022, respectively. Groundwater samples collected during these sampling events exhibited concentrations of COCs above the WQCC standards.

The primary objective of the 2023 groundwater monitoring was to further evaluate the concentrations of COCs in groundwater and to monitor COC concentrations over time at the Site.

Findings based on these activities are as follows:

- The groundwater flow direction at the Site is generally towards the northwest, with an approximate average gradient of 0.0085 feet per foot (ft/ft) across the Site.
- Benzene was reported at concentrations exceeding the NM WQCC GQS of 10 micrograms per liter (µg/L) (see footnote in report) in groundwater samples collected from monitoring well MW-19 during the May 2023 and November 2023 sampling events. The groundwater samples collected from the other monitoring wells sampled in 2023 did not exhibit COC concentrations above the applicable WQCC GQSs.
- Monitoring well MW-19 has exhibited relatively stable benzene concentrations since 2012.

Ensolum offers the following recommendations:

- Report the groundwater monitoring results to the NM EMNRD OCD.
- Continue semi-annual groundwater monitoring at the Site, limiting the sampling frequency of monitoring wells MW-3, MW-11, MW-12, and MW-13 to annually, as approved by the NM EMNRD OCD in an email dated June 8, 2020.
- Install a shallow recovery well upgradient of monitoring well MW-19 and repair or replace monitoring well MW-18, as described in the Stage 1 Abatement Plan and as approved by the NM EMNRD OCD in an email dated June 8, 2020. Consider performing aquifer testing after the recovery well has been installed.



TABLE OF CONTENTS
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1.0	INTRODUCTION	1
1.1	Site Description & Background	1
1.2	Project Objective	2
2.0	GROUNDWATER MONITORING	2
2.1	Groundwater Laboratory Analytical Methods	3
2.2	Groundwater Flow Direction	4
2.3	Groundwater Data Evaluation	4
3.0	FINDINGS	5
4.0	RECOMMENDATIONS	6
5.0	STANDARDS OF CARE, LIMITATIONS, AND RELIANCE	6
5.1	Standard of Care	6
5.2		
5.3	Reliance	6
3.0		

### LIST OF APPENDICES

#### Appendix A -**Figures**

Figure 1: Topographic Map

Figure 2: Site Vicinity Map

Figure 3: Site Map

Figure 4A: Groundwater Gradient Map (May 2023)

Figure 4B: Groundwater Gradient Map (November 2023)

Figure 5A: Groundwater Quality Standard (GQS) Exceedance Zone Map

(May 2023)

Figure 5B: Groundwater Quality Standard (GQS) Exceedance Zone Map

(November 2023)

## Appendix B - Regulatory Correspondence

### Appendix C - Tables

Table 1: Groundwater Analytical Summary

Table 2: Groundwater Elevations

## **Appendix D – Laboratory Data Sheets & Chain of Custody Documentation**

## Appendix E – Benzene Concentration Chart

#### 1.0 INTRODUCTION

Lateral K-51 Pipeline Release (2010)

This report describes the 2023 groundwater monitoring activities conducted at the Lateral K-51 Pipeline Release (2010) site, referred to hereinafter as the "Site".

#### 1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral K-51 Pipeline Release (2010)
NM EMNRD OCD Incident ID No.	nAUTOfAB000318
Location:	36.4465° North, 107.4461° West Unit Letter H of Section 34 and Unit Letter E of Section 35, Township 26 North, Range 6 West Rio Arriba County, New Mexico
Property:	United States (US) Bureau of Land Management (BLM) and Private Land
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On April 13, 2010, an estimated ten barrels of natural gas condensate were released from the Enterprise Lateral K-51 pipeline. The pipeline was subsequently repaired, and remediation activities were initiated to remove hydrocarbon affected soils. Souder, Miller, and Associates (SMA) collected confirmation soil samples and one groundwater sample from the final excavation. The excavation was then backfilled with unaffected soils. Confirmation soil samples collected from the excavation exhibited concentrations of constituents of concern (COCs) above the applicable EMNRD OCD closure criteria for soils. The groundwater sample exhibited concentrations of COCs above the New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) for groundwater.

During June 2010, eight soil borings (BH-1 through BH-8) were advanced by LT Environmental (LTE). Four of the soil borings were completed as groundwater monitoring wells (MW-1 through MW-4). Analytical results from soil samples collected immediately adjacent to the release and near the groundwater interface (BH-1) indicated COC concentrations above the applicable New Mexico EMNRD OCD closure criteria. Analysis of groundwater samples collected from monitoring wells MW-1 through MW-4 indicated COC concentrations above the New Mexico WQCC GQSs (Site Investigation Report, LTE, August 9, 2010).

During April 2011, nine soil borings/monitoring wells (SB-9, SB-10, MW-11 through MW-14, SB-15, MW-16, and MW-17) were advanced by Southwest Geoscience (SWG) to further evaluate the extent of dissolved phase COCs in groundwater. Additionally, 15 injection points were installed to facilitate the proposed in-situ chemical oxidation (ISCO) of the COCs utilizing a hydrogen peroxide solution. ISCO activities were performed during May 2011 (Supplemental Site Investigation and Corrective Action Report, SWG, October 5, 2011). Based on the distribution of COCs in groundwater, it appears that a former drip valve, tank, or pit may have also provided a historic source of petroleum hydrocarbon impact to groundwater (New Mexico EMNRD OCD reference 3RP-206, El Paso Natural Gas, Final Pit Closure) in the vicinity of monitoring well MW-14.

During March 2012, three additional soil borings/monitoring wells (MW-18, MW-19, and MW-20) were advanced near and downgradient of the historic release area to further evaluate the extent of COCs in groundwater (Supplemental Site Investigation & Corrective Action Work Plan, SWG,



Lateral K-51 Pipeline Release (2010)

April 23, 2012). Soil boring/monitoring well MW-18 was advanced west of the presumed location of the historic release, and soil borings/monitoring wells MW-19 and MW-20 were advanced to the north and northwest, respectively, of the presumed location of the historic release.

Quarterly and semi-annual groundwater monitoring was conducted from 2012 through 2014 and 2015 through 2018, respectively. During February 2019, Enterprise assigned management of the project to Ensolum, LLC (Ensolum).

During May of 2019, Enterprise submitted a revised Stage 1 Abatement Plan for this Site to the New Mexico EMNRD OCD (*Revised Lateral K-51 Pipeline Release (2010) Stage 1 Abatement Plan*, Ensolum, May 22, 2019). The New Mexico EMNRD OCD has not approved the plan, and Enterprise has resumed semi-annual groundwater monitoring of the Site.

Groundwater monitoring activities performed between 2019 and 2023 are documented in the following reports:

- 2019 Groundwater Monitoring Report, Ensolum, August 10, 2020
- 2020 Groundwater Monitoring Report, Ensolum, March 19, 2021
- 2021 Groundwater Monitoring Report, Ensolum, March 29, 2022
- 2022 Groundwater Monitoring Report, Ensolum, March 22, 2023

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to oil and gas releases, the New Mexico EMNRD OCD references 19.15.29 New Mexico Administrative Code (NMAC) *Releases*, which establishes investigation and abatement action requirements for sites that are subject to reporting and/or corrective action. Additionally, the New Mexico EMNRD OCD utilizes the New Mexico WQCC GQS (20.6.2 NMAC *Ground and Surface Water Protection*) to evaluate groundwater conditions.<sup>1</sup>

The Site location is depicted on **Figure 1** of **Appendix A** which was reproduced from a portion of a United States Geological Survey (USGS) 7.5-minute series topographic map. A **Site Vicinity Map**, created from an aerial photograph, is provided as **Figure 2**, and a **Site Map**, which indicates the approximate locations of the monitoring wells and previous soil boring locations in relation to pertinent structures and general Site boundaries, is included as **Figure 3** of **Appendix A**.

## 1.2 Project Objective

The objective of the groundwater monitoring was to further evaluate groundwater quality at the Site and evaluate natural attenuation of COC concentrations over time.

### 2.0 GROUNDWATER MONITORING

Ensolum conducted groundwater sampling events during May 2023 and November 2023. The groundwater sampling program consisted of the collection of one groundwater sample from each of the viable monitoring wells at the Site. Monitoring well MW-18 appears to be obstructed (silted in or collapsed). Water was detected in the well (for the first time since 2018) during the May 2023 event and a sample was collected using a bailer. Based on calculated groundwater elevation, this water appears to be related to a recent rain event (and not representative of groundwater) and was not considered for potentiometric mapping purposes. MW-18 was not sampled during the November 2023 sampling event. On June 8, 2020, the New Mexico EMNRD OCD approved a request to reduce the sampling frequency for monitoring wells MW-3 and MW-11 through MW-13

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site that predates the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



Lateral K-51 Pipeline Release (2010)

to annually. Therefore, only eight monitoring wells were sampled during the November 2023 sampling event. The New Mexico EMNRD OCD was notified of the sampling events, although no representative was present to observe the sampling activities. Regulatory correspondence is provided in **Appendix B**.

Ensolum's groundwater sampling program consisted of the following:

- Prior to sample collection, Ensolum gauged the depth to fluids in each monitoring well using an interface probe capable of detecting non-aqueous phase liquid (NAPL).
- Each designated monitoring well was sampled utilizing micro-purge low-flow sampling techniques. Following the completion of the micro-purge process, the groundwater sample was collected.
- Low-flow or low-stress sampling refers to sampling methods that are intended to minimize
  the stress that is imparted to the formation pore water in the vicinity of the well screen. Water
  level drawdown provides the best indication of the stress that is imparted by a given flow
  rate for a given hydrological situation. Pumping rates of 0.1 to 0.5 liters per minute (L/min)
  are typically maintained during the low-flow/low-stress sampling activities, using dedicated
  or decontaminated sampling equipment.
- During low-flow sampling, groundwater samples are collected from each monitoring well once produced groundwater is consistent in color, clarity, pH, temperature, and conductivity. Measurements are typically observed every three to five minutes while purging. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for at least three consecutive readings.
- Groundwater samples were collected in laboratory-supplied containers (pre-preserved with mercuric chloride (HgCl<sub>2</sub>)), labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for Eurofins Environment Testing South Central, LLC (Eurofins) (formerly Hall Environmental Analysis Laboratory) of Albuquerque, New Mexico under proper chain-ofcustody procedures.

### 2.1 Groundwater Laboratory Analytical Methods

The groundwater samples collected from the monitoring wells during the two sampling events were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) utilizing US Environmental Protection Agency (EPA) SW-846 Method #8021.

A summary of the analytes, sample matrix, sample frequency and EPA-approved analytical methods are presented in the following table.

Analyte	Analyte Sample Type		Method	
BTEX	Groundwater	13/8	SW-846 #8021	

The laboratory analytical results are summarized in **Table 1** in **Appendix C**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix D**.



## 2.2 Groundwater Flow Direction

The groundwater flow direction at the Site generally trends toward the northwest. The calculated gradient during the 2023 monitoring events averaged approximately 0.0085 feet per foot (ft/ft) across the Site. Groundwater elevation data collected during the 2023 gauging events are presented in **Table 2** (**Appendix C**). Groundwater gradient maps for the 2023 gauging events are included as **Figure 4A** and **Figure 4B** (**Appendix A**).

### 2.3 Groundwater Data Evaluation

Ensolum compared the BTEX laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the groundwater samples collected from monitoring wells during the 2023 groundwater sampling events to the New Mexico WQCC GQSs. The results of the analyses are summarized in **Table 1** of **Appendix C**. Groundwater Quality Standard Exceedance Zone Maps are provided as **Figure 5A** and **Figure 5B** of **Appendix A**.

### May 2023

- The May 2023 analytical result for monitoring well MW-19 indicates a benzene concentration of 57 micrograms per liter (μg/L), which exceeds the WQCC GQS of 10 μg/L.¹ The analytical results for monitoring wells MW-4 and MW-14 each indicate benzene concentrations of 1.1 μg/L, which are below the WQCC GQS of 10 μg/L.¹ The analytical results for the remaining monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 10 μg/L.¹
- The May 2023 analytical results for the monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 μg/L.<sup>1</sup>
- The May 2023 analytical result for monitoring well MW-19 indicates an ethylbenzene concentration of 20 μg/L, which is below the WQCC GQS of 750 μg/L.¹ The analytical results for the remaining monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 μg/L.¹
- The May 2023 analytical result for monitoring well MW-4 indicates a total xylene concentration
  of 2.4 μg/L, which is below the WQCC GQS of 620 μg/L.<sup>1</sup> The analytical results for the
  remaining monitoring wells do not indicate total xylene concentrations above the laboratory
  PQLs/RLs, which are below the WQCC GQS of 620 μg/L.<sup>1</sup>
- The following data qualifier was associated with the May 2023 data:

May 2023 Data Qualifier Flag								
Sample IDs	Data Qualifier Flags	Comments/Reactions						
MW-19 (collected 5/25/2023)	Sample Diluted Due to Matrix.	The sample was diluted due to matrix interference. The results are usable for the intended purpose.						

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site that predates the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



Lateral K-51 Pipeline Release (2010)

### November 2023

- The November 2023 analytical result for monitoring well MW-19 indicates a benzene concentration of 200 µg/L, which exceeds the WQCC GQS of 10 µg/L. The analytical results for the remaining sampled monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 10 µg/L.1
- The November 2023 analytical results for the sampled monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 µg/L.1
- The November 2023 analytical result for monitoring well MW-19 indicates an ethylbenzene concentration of 41 µg/L, which is below the WQCC GQS of 750 µg/L.1 The analytical results for the remaining sampled monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 µg/L.1
- The November 2023 analytical results for the sampled monitoring wells do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 µg/L.1
- The following data qualifier was associated with the November 2023 data:

November 2023 Data Qualifier Flag								
Sample IDs	Data Qualifier Flags	Comments/Reactions						
MW-19 (collected 11/20/2023)	Sample Diluted Due to Matrix.	The sample was diluted due to matrix interference. The results are usable for the intended purpose.						

#### 3.0 **FINDINGS**

Based on the evaluation of the analytical results from the groundwater monitoring activities, Ensolum presents the following findings:

- The groundwater flow direction at the Site is generally towards the northwest, with an approximate average gradient of 0.0085 ft/ft across the Site.
- Benzene was reported at concentrations exceeding the New Mexico WQCC GQS of 10 µg/L in groundwater samples collected from monitoring well MW-19 during the May 2023 and November 2023 sampling events.1 The groundwater samples collected from the other sampled monitoring wells in 2023 do not exhibit COC concentrations above the applicable WQCC GQSs.1
- Monitoring well MW-19 has exhibited relatively stable benzene concentrations since 2012 as depicted in the chart provided in **Appendix E**.

<sup>&</sup>lt;sup>1</sup> NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site that predates the 2018 rule change. Therefore, this document reflects the GQSs that were applicable at the time of initial remediation.



#### 4.0 **RECOMMENDATIONS**

Lateral K-51 Pipeline Release (2010)

Based on the results of the groundwater monitoring activities, Ensolum has the following recommendations:

- Report the groundwater monitoring data to the New Mexico EMNRD OCD.
- Continue semi-annual groundwater monitoring at the Site, limiting the sampling frequency of monitoring wells MW-3, MW-11, MW-12, and MW-13 to annually, as approved by the New Mexico EMNRD OCD in an email dated June 8, 2020.
- Install a shallow recovery well upgradient of monitoring well MW-19 and repair or replace monitoring well MW-18, as described in the Stage 1 Abatement Plan and as approved by the NM EMNRD OCD in an email dated June 8, 2020. Consider performing aguifer testing after the recovery well has been installed.

#### 5.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

#### 5.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties).

#### 5.2 Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work, and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendation are based solely upon data available to Ensolum at the time of these services.

#### 5.3 Reliance

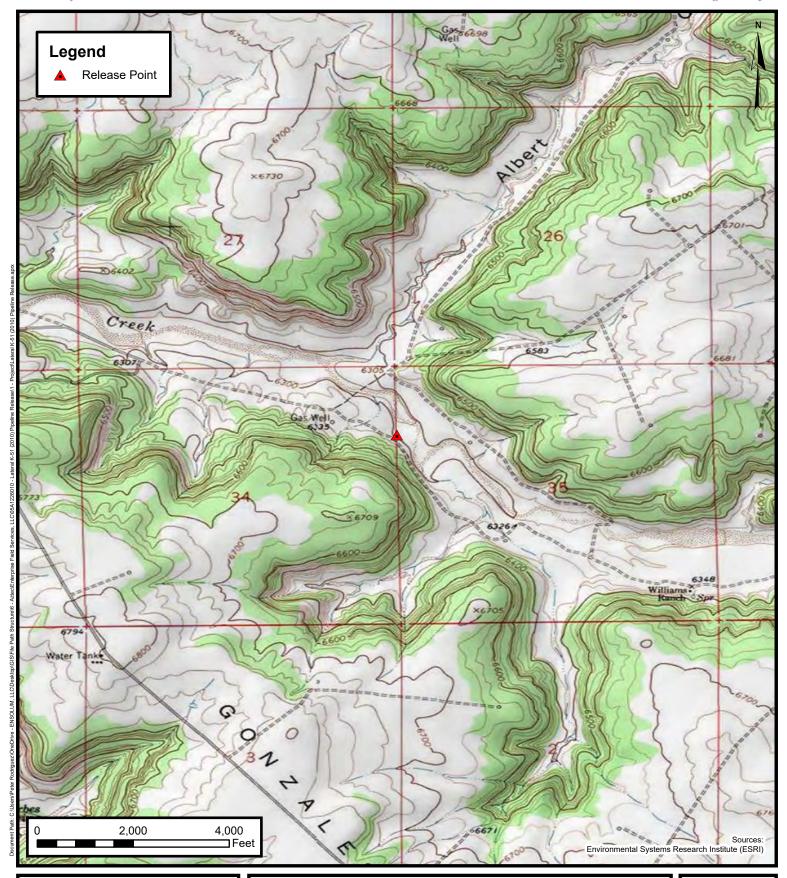
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the Closure Report and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



# **E N S O L U M**

# **APPENDIX A**

**Figures** 





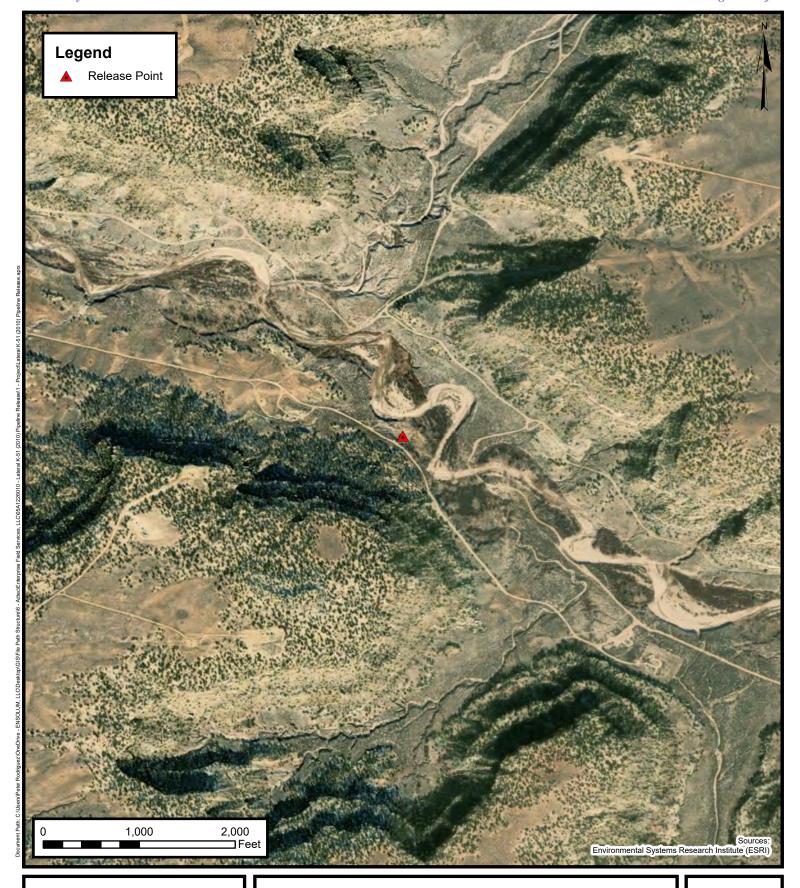
## **Topographic Map**

Enterprise Field Services, LLC Lateral K-51 (2010) Pipeline Release Project Number: 05A1226010

Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico  $36.4465^\circ$  N, -107.4461  $^\circ$  W

**FIGURE** 

1





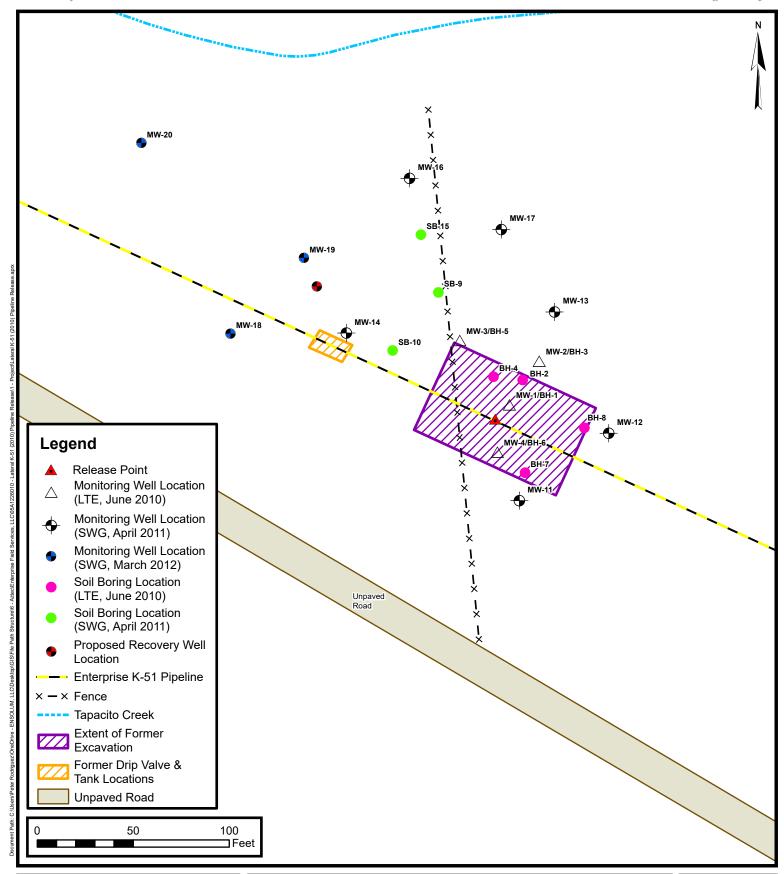
# **Site Vicinity Map**

Enterprise Field Services, LLC Lateral K-51 (2010) Pipeline Release Project Number: 05A1226010

Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, -107.4461° W

**FIGURE** 

2





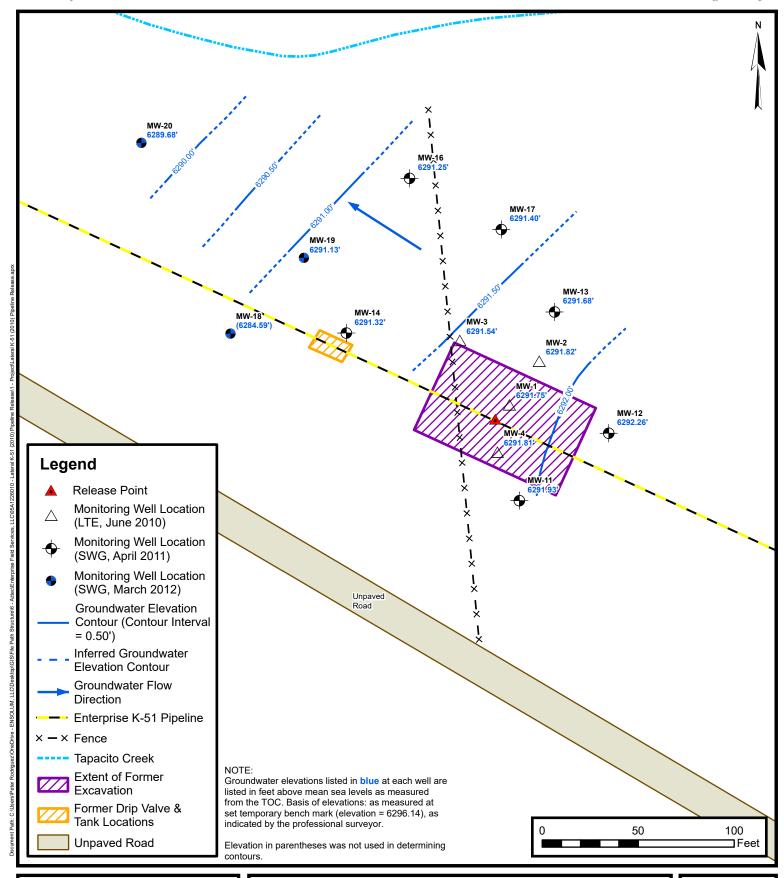
## **Site Map**

Enterprise Field Services, LLC Lateral K-51 (2010) Pipeline Release Project Number: 05A1226010

Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico 36.4465° N, -107.4461° W

FIGURE 3

Released to Imaging: 8/6/2024 3:47:11 PM



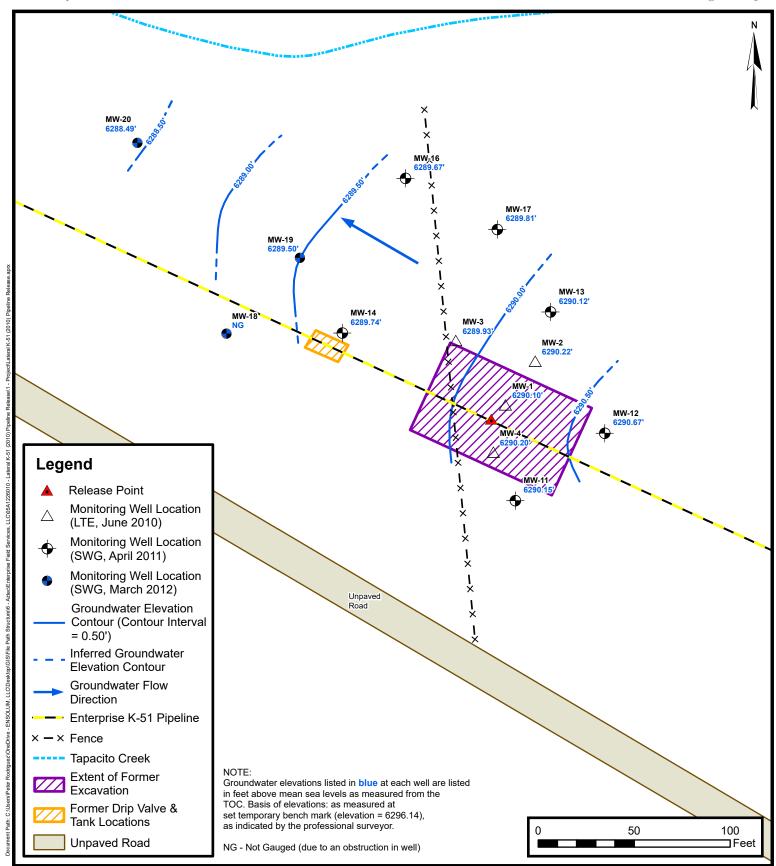


## Groundwater Gradient Map (May 2023)

Enterprise Field Services, LLC Lateral K-51 (2010) Pipeline Release Project Number: 05A1226010

Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico  $36.4465^{\circ}$  N, -107.4461  $^{\circ}$  W

FIGURE 4A



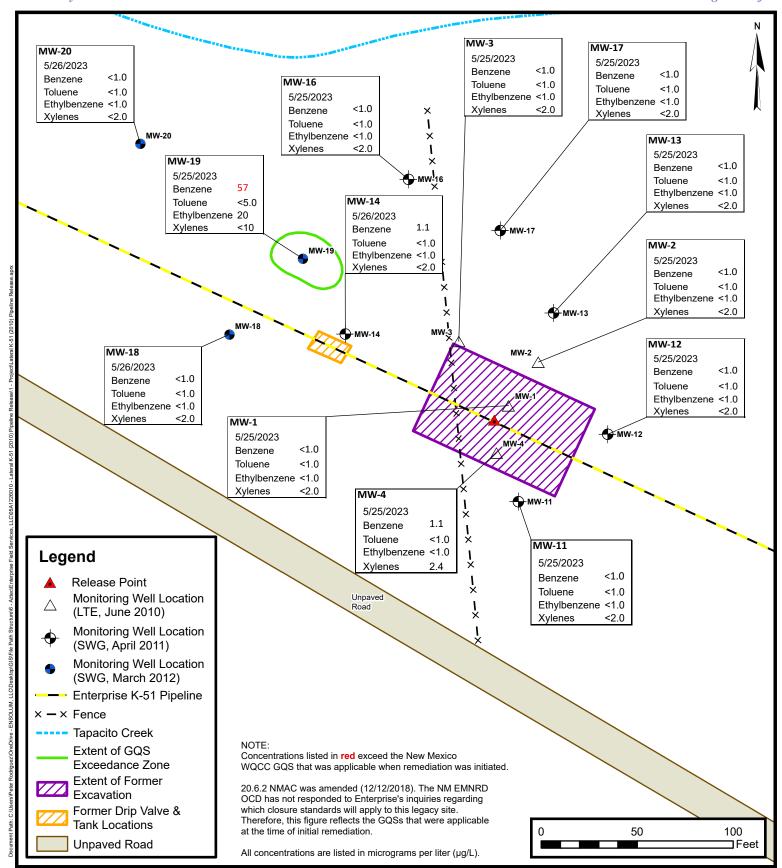


# Groundwater Gradient Map (November 2023)

Enterprise Field Services, LLC Lateral K-51 (2010) Pipeline Release Project Number: 05A1226010

Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico  $36.4465^{\circ}$  N, -107.4461  $^{\circ}$  W

FIGURE 4B



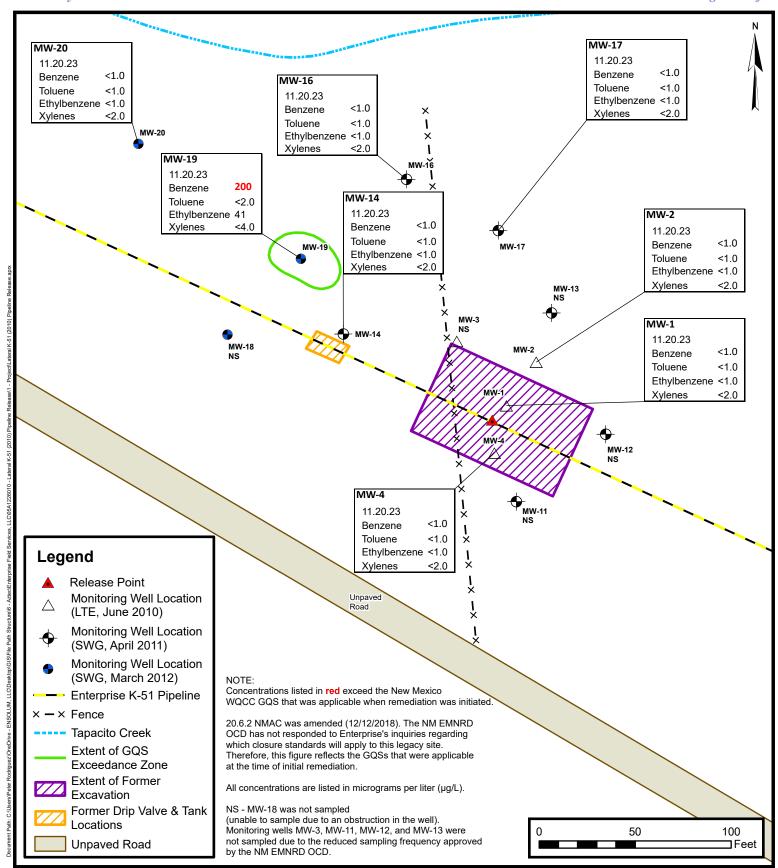


# Groundwater Quality Standard (GQS) Exceedance Zone Map (May 2023)

Enterprise Field Services, LLC Lateral K-51 (2010) Pipeline Release Project Number: 05A1226010

Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico  $36.4465^\circ$  N, -107.4461 $^\circ$  W

FIGURE **5A** 





# Groundwater Quality Standard (GQS) Exceedance Zone Map (November 2023)

Enterprise Field Services, LLC Lateral K-51 (2010) Pipeline Release Project Number: 05A1226010

Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico  $36.4465^\circ$  N, -107.4461 $^\circ$  W

FIGURE 5B



# **APPENDIX B**

Regulatory Correspondence

From: Kyle Summers

To: Ranee Deechilly; Landon Daniell

Subject: FW: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-346 - Section 34/35

T26N R6W; 36.4465, -107.4461; NMOCD Incident # # NAUTOFAB000318

**Date:** Tuesday, November 14, 2023 12:16:35 PM

Attachments: Outlook-a0unkfod.png

image004.png image005.png image006.png



Kyle Summers
Principal

903-821-5603 Ensolum, LLC

in f 🏏

From: Velez, Nelson, EMNRD < Nelson. Velez@emnrd.nm.gov>

Sent: Tuesday, November 14, 2023 10:22 AM

**To:** Long, Thomas <tjlong@eprod.com>; Craun, James N <jcraun@blm.gov>

**Cc:** Stone, Brian <br/>
Stone@eprod.com>; Drewry, Scott <sdrewry@eprod.com>; Fields, Jon <JEFIELDS@eprod.com>; Kyle Summers <ksummers@ensolum.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

**Subject:** Re: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-346 - Section 34/35 T26N R6W; 36.4465, -107.4461; NMOCD Incident # # NAUTOFAB000318

## [ \*\*EXTERNAL EMAIL\*\*]

Good morning Tom,

Thank you for the notice.

If an OCD representative is not on-site on the date &/or time given, please proceed with your sampling. For whatever reason, the sample collection timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of the rescheduling may result in the sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

If you have any questions, please contact me via email at your convenience.

Thanks again

Regards,

Nelson Velez • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

http://www.emnrd.state.nm.us/OCD/\_



From: Long, Thomas <tilong@eprod.com>

Sent: Tuesday, November 14, 2023 10:09 AM

**To:** Velez, Nelson, EMNRD < Nelson. Velez@emnrd.nm.gov >; Craun, James N < icraun@blm.gov > Cc: Stone, Brian < bmstone@eprod.com >; Drewry, Scott < sdrewry@eprod.com >; Fields, Jon

<JEFIELDS@eprod.com>; Kyle Summers <ksummers@ensolum.com>

**Subject:** RE: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-346

- Section 34/35 T26N R6W; 36.4465, -107.4461; NMOCD Incident # # NAUTOFAB000318

Nelson/James,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Monday, November 20, 2023. Field work is anticipated to take two working days. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com



From: Velez, Nelson, EMNRD < Nelson. Velez@emnrd.nm.gov >

**Sent:** Monday, May 22, 2023 3:08 PM **To:** Long, Thomas < tilong@eprod.com>

Subject: Re: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344

- Section 34/35 T26N R6W; 36.4465, -107.4461

## [Use caution with links/attachments]

Tom,

Please note the following corrections;

Admin. Order # is AP-130 Admin. Order # is 3RP-446

Please use incident # NAUTOFAB000318 in future correspondence related to this site.

Lastly, the facility ID: FGVG1414854130 (FYI).

**Nelson Velez** • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | <u>nelson.velez@emnrd.nm.gov</u>

http://www.emnrd.state.nm.us/OCD/



From: Long, Thomas < tilong@eprod.com>
Sent: Monday, May 22, 2023 1:39 PM

**To:** Velez, Nelson, EMNRD < <u>Nelson.Velez@emnrd.nm.gov</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Miller, Greg < GEMiller@eprod.com >; Kyle Summers < ksummers@ensolum.com >

**Subject:** FW: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344 - Section 34/35 T26N R6W; 36.4465, -107.4461

Nelson,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Thursday, May 25, 2023. Field work is anticipated to take two working days. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



From: Long, Thomas

**Sent:** Monday, October 31, 2022 10:24 AM

**To:** Velez, Nelson, EMNRD < Nelson. Velez@state.nm.us >

**Cc:** Stone, Brian < bmstone@eprod.com >; Miller, Greg < GEMiller@eprod.com >; Kyle Summers

<<u>ksummers@ensolum.com</u>>; Miller, Greg <<u>GEMiller@eprod.com</u>>

**Subject:** RE: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344

- Section 34/35 T26N R6W; 36.4465, -107.4461

Nelson,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Thursday, November 3, 2022. Field work is anticipated to take one to two working days. If you have any questions, please call or email.

Thomas J. Long Senior Environmental Scientist Enterprise Products Company 614 Reilly Ave. Farmington, New Mexico 87401 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com



From: Velez, Nelson, EMNRD < Nelson. Velez@state.nm.us >

**Sent:** Friday, May 13, 2022 8:06 AM **To:** Long, Thomas < tilong@eprod.com>

**Cc:** Stone, Brian < bmstone@eprod.com >; Miller, Greg < GEMiller@eprod.com >; Kyle Summers

< ksummers@ensolum.com>

Subject: RE: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344

- Section 34/35 T26N R6W; 36.4465, -107.4461

## [Use caution with links/attachments]

Tom,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please proceed with your sampling. For whatever reason, the sample collection timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of the rescheduling may result in the sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

If you have any questions, please contact me via email at your convenience.

Thanks again

Regards,

Nelson Velez ● Environmental Specialist - Adv Environmental Bureau | EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87410 (505) 469-6146 | nelson.velez@state.nm.us

Hrs.: 7:00–11:00 am & 12:00–3:30 pm Mon.–Thur. 7:00-11:00 am & 12:00-4:00 pm Fri.

**From:** Long, Thomas < tilong@eprod.com>

**Sent:** Friday, May 13, 2022 7:52 AM

**To:** Velez, Nelson, EMNRD < <u>Nelson.Velez@state.nm.us</u>>

**Cc:** Stone, Brian <a href="mailto:stone@eprod.com">bmstone@eprod.com</a>; Miller, Greg <a href="mailto:stone@eprod.com">GEMiller@eprod.com</a>; Kyle Summers <<u>ksummers@ensolum.com</u>>

Subject: [EXTERNAL] FW: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344 -Section 34/35 T26N R6W; 36.4465, -107.4461

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Nelson,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Thursday, May 19, 2022. Field work is anticipated to take one working day. If you have any questions, please call or email.

Thomas J. Long Senior Environmental Scientist **Enterprise Products Company** 614 Reilly Ave. Farmington, New Mexico 87401 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com



**From:** Long, Thomas

Sent: Thursday, November 18, 2021 8:12 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>

**Cc:** Stone, Brian < bmstone@eprod.com >; Miller, Greg < GEMiller@eprod.com >; Griswold, Jim,

EMNRD < Jim. Griswold@state.nm.us>

Subject: Lateral K-51 - Groundwater Monitoring and Sampling - AP 103/3RP-344 - Section 34/35

T26N R6W; 36.4465, -107.4461

Cory,

This email is to notify you that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-51 release site to begin Monday, November 22, 2021. Field work is anticipated to take one working day. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tilong@eprod.com



This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.



# **APPENDIX C**

**Tables** 

## **ENSOLUM**

		l atoral k	TABLE	1 Release (2010)			
				TICAL SUMMAR	Y		
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	ТРН
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
					0	(mg/L)	(mg/L)
New Mexico Wa	ter Quality Control						
Commmission Groundwater Quality Standards		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
		SMA	Sample - Oper	Excavation			
Excavation	4.21.10	7,000	13,000	540	5,200	NA	NA
		Monito	oring Wells Ins	talled by LTE			
	6.21.10	8,400	1,300	560	4,200	NA	NA
	9.24.10	2,300	28	200	520	8.4	<1.0
	4.21.11	430	<20	120	60	2.1	<1.0
	6.21.11	820	370	33	140	5.1	130
	9.22.11	690	1,200	120	1,200	8.9	30
	12.13.11	260	250	54	650	3.4	<1.0
	3.20.12	280	230	94	550	3.5	<1.0
	6.19.12	300	<5.0	81	96	1.7	<1.0
	9.20.12*	45	3.4	15	23	0.45	<1.0
	12.17.12	34	<1.0	11	16	0.19	<1.0
	3.25.13	41	<1.0	19	32	0.27	<1.0
	6.27.13	24	<1.0	<1.0	36	0.22	<1.0
	10.22.13	39	<1.0	24	13	0.23	<1.0
	12.16.13	10	<1.0	14	11	0.18	<1.0
	4.18.14	23	<1.0	28	86	0.38	1.1
	11.6.14	32	<1.0	27	61	NA	NA
MW-1	5.29.15	11	<1.0	21	55	NA	NA
	12.1.15	5.3	<1.0	4.0	6.2	NA	NA
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.16	17	<1.0	1.6	2.4	NA	NA
	5.30.17	4.1	<1.0	<1.0	<1.5	NA	NA
	12.07.17	2.8	<1.0	2.0	<1.5	NA	NA
	5.30.18	3.0	<1.0	<1.0	2.2	NA	NA
	11.2.18	1.2	<1.0	<1.0	<1.5	NA	NA
	9.25.19	1.8	<1.0	<1.0	<2.0	NA	NA
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.20.23	<1.0	<1.0	<1.0	<2.0	NA	NA

## **E N S O L U M**

			TABLE	1			
				Release (2010)			
		GROUNDW		TICAL SUMMAR			
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO
Name Mandan Mark	0					(mg/L)	(mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE
	dards	.0	7.00	7.60	020		
	6.21.10	200	53	14	96	NA	NA
	9.24.10	2.3	<1.0	<1.0	<2.0	<0.050	<1.0
	4.21.11	3.3	<1.0	<1.0	<2.0	0.065	<1.0
	6.21.11	2.2	<1.0	<1.0	<2.0	<0.050	<1.0
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA
MW-2	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA
IVIVV-Z	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.20.23	<1.0	<1.0	<1.0	<2.0	NA	NA

## **ENSOLUM**

TABLE 1												
Lateral K-51 Pipeline Release (2010)												
GROUNDWATER ANALYTICAL SUMMARY												
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH					
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO					
						(mg/L)	(mg/L)					
New Mexico Water Quality Control Commmission Groundwater Quality		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE					
Standards		10	750	750	620	NL	NL					
	6.21.10	640	57	72	1,000	NA	NA					
	9.24.10	150	<1.0	16	28	0.48	<1.0					
	4.21.11	52	<1.0	17	10	0.25	<1.0					
	6.21.11	62	14	13	160	0.67	<1.0					
	9.22.11	3	<1.0	8.7	<2.0	0.066	<1.0					
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	3.20.12	1.3	<1.0	1.9	<2.0	<0.050	<1.0					
	6.19.12	3.1	<1.0	1.4	<2.0	<0.050	<1.0					
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0					
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA					
MW-3	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA					
	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA					
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA					
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA					
	5.30.17	<1.0	<1.0	<1.0	<1.5	NA	NA					
	12.07.17	<1.0	<1.0	<1.0	<1.5	NA	NA					
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA					
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA					
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA					
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA					
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA					
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA					
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA					
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS					
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA					
	11.8.22 <sup>B</sup>	NS	NS	NS	NS	NS	NS					
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA					
	11.20.23 <sup>B</sup>	NS	NS	NS	NS	NS	NS					

## **E N S O L U M**

TABLE 1												
Lateral K-51 Pipeline Release (2010)												
GROUNDWATER ANALYTICAL SUMMARY												
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH					
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO					
Name Mandan 1964	0					(mg/L)	(mg/L)					
New Mexico Water Quality Control Commmission Groundwater Quality		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE					
Standards					525							
	6.21.10	3,600	10,000	600	6,600	NA	NA					
	9.24.10	870	870	260	1,600	12	1					
	4.21.11	670	<20	520	790	6.3	<1.0					
	6.21.11	17	22	36	77	0.64	1.1					
	9.22.11	62	140	220	820	3.8	1.2					
	12.13.11	84	<20	430	490	2.6	<1.0					
	3.20.12	36	<20	1,100	1,400	6.5	<1.0					
	6.19.12	37	<5.0	250	350	2.2	<1.0					
	9.19.12	9.4	1.4	74	97	0.84	<1.0					
	12.17.12	<1.0	<1.0	6.2	9.7	0.12	<1.0					
	3.25.13	3.2	<1.0	51	55	1.0	<1.0					
	6.27.13	3.9	<1.0	61	60	1.3	<1.0					
	10.22.13	<1.0	<1.0	12	3.8	0.13	<1.0					
	12.13.13	<1.0	<1.0	16	6.2	0.4	<1.0					
	4.17.14	<1.0	<1.0	76	14	0.78	<1.0					
	11.6.14	<1.0	<1.0	11	2.9	NA	NA					
MW-4	5.29.15	<1.0	<1.0	24	6.1	NA	NA					
	12.1.15	<1.0	<1.0	2.5	2.1	NA	NA					
	5.25.16	<1.0	<1.0	7.4	<2.0	NA	NA					
	11.8.16	2.4	<1.0	4.8	2.1	NA	NA					
	5.26.17	<1.0	<1.0	3.9	<1.5	NA	NA					
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA					
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA					
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA					
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA					
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA					
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA					
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA					
	5.28.21	<1.0	<1.0	<1.0	2.9	NA	NA					
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA					
	5.19.22	<1.0	<1.0	<1.0	3.6	NA	NA					
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA					
	5.25.23	1.1	<1.0	<1.0	2.4	NA	NA					
	11.20.23	<1.0	<1.0	<1.0	<2.0	NA	NA					

			TABLE	1					
				Release (2010)					
		GROUNDW	ATER ANALY	TICAL SUMMAR	Υ				
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH		
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO		
						(mg/L)	(mg/L)		
	ter Quality Control roundwater Quality	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE		
	dards	10	750	750	620	NE	NE		
Monitoring Wells Installed by Apex TITAN (formerly Southwest Geoscience)									
	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0		
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA		
	5.29.15	<1.0	<1.0	<1.0	<2.0	NA	NA		
MW-11	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA		
1010 0 - 1 1	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA		
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA		
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA		
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA		
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA		
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA		
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA		
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA		
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA		
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA		
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA		
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS		
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA		
	11.8.22 <sup>B</sup>	NS	NS	NS	NS	NS	NS		
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA		
	11.20.23 <sup>B</sup>	NS	NS	NS	NS	NS	NS		

	TABLE 1  Lateral K-51 Pipeline Release (2010)  GROUNDWATER ANALYTICAL SUMMARY									
Sample I.D.	Date	Benzene (μg/L)	Toluene (μg/L)	Ethylbenzene (μg/L)	Xylenes (μg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)			
Commmission Gr	er Quality Control coundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE			
	4.21.11	1.9	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.21.11	4.6	<1.0	<1.0	<2.0	0.063	<1.0			
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.19.12	1.7	<1.0	<1.0	<2.0	<0.050	<1.0			
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.13.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.29.15	<1.0	<1.0	<1.0	<2.0	NA	NA			
MW-12	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA			
IVIVV-12	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA			
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA			
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA			
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA			
	5.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA			
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS			
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.8.22 <sup>B</sup>	NS	NS	NS	NS	NS	NS			
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.20.23 <sup>B</sup>	NS	NS	NS	NS	NS	NS			

	TABLE 1  Lateral K-51 Pipeline Release (2010)										
				Release (2010) TICAL SUMMAR	Y						
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	ТРН	TPH				
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO				
						(mg/L)	(mg/L)				
Commmission Gr	er Quality Control coundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE				
	4.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	9.20.12	NS	NS	NS	NS	NS	NS				
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.12.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
MW-13	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
10100-13	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.08.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.30.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.01.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA				
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.22.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS				
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.8.21 <sup>B</sup>	NS	NS	NS	NS	NS	NS				
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.20.23 <sup>B</sup>	NS	NS	NS	NS	NS	NS				

	TABLE 1  Lateral K-51 Pipeline Release (2010)										
				Release (2010) TICAL SUMMAR	Y						
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	ТРН	TPH				
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO				
						(mg/L)	(mg/L)				
Commmission Gr	er Quality Control oundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE				
	4.21.11	2,800	<100	280	720	8.7	<1.0				
	6.21.11	470	<10	37	210	1.9	<1.0				
	9.22.11	540	<10	100	36	1.7	<1.0				
	12.13.11	220	<10	110	<20	1.0	<1.0				
	3.20.12	660	<5.0	240	15	2.9	<1.0				
	6.19.12	660	<5.0	300	100	3.4	<1.0				
	9.20.12*	7.3	<1.0	<1.0	<2.0	0.1	<1.0				
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	3.25.13	<1.0	<1.0	1.6	<2.0	<0.050	<1.0				
	6.27.13	34	4.4	30	130	0.56	1.4				
	10.22.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.16.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	4.18.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
MW-14	11.30.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
10100-14	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.7.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	12.06.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	9.20.19	<1.0	<1.0	<1.0	<2.0	NA	NA				
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.20.22	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.26.23	1.1	<1.0	<1.0	<2.0	NA	NA				
	11.20.23	<1.0	<1.0	<1.0	<2.0	NA	NA				

	TABLE 1  Lateral K-51 Pipeline Release (2010)										
				Release (2010) TICAL SUMMAR	Y						
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH				
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO				
						(mg/L)	(mg/L)				
Commmission Gr	er Quality Control coundwater Quality dards	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE				
	4.21.11	4.4	<2.0	<2.0	<4.0	<0.10	<1.0				
	6.21.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	9.22.11	<1.0	<1.0	<1.0	<2.0	0.065	<1.0				
	12.13.11	<1.0	<1.0	<1.0	<2.0	0.12	<1.0				
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.17.12	3.1	<1.0	2.1	14	0.19	<1.0				
	3.25.13	<1.0	<1.0	<1.0	<1.0	<0.050	<1.0				
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.12.13	1	<1.0	<1.0	<2.0	<0.050	<1.0				
	4.17.14	1.4	<1.0	<1.0	<2.0	<0.050	<1.0				
	11.6.14	1.2	<1.0	<1.0	<2.0	NA	NA				
	5.29.15	3.0	<1.0	<1.0	<2.0	NA	NA				
MW-16	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
10100-10	5.25.16	2.2	<1.0	<1.0	<2.0	NA	NA				
	11.7.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.30.17	2.1	<1.0	<1.0	<1.5	NA	NA				
	12.7.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.2.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA				
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.20.22	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.20.23	<1.0	<1.0	<1.0	<2.0	NA	NA				

	TABLE 1  Lateral K-51 Pipeline Release (2010)										
				Release (2010) TICAL SUMMAR	Y						
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH				
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO				
						(mg/L)	(mg/L)				
Commmission Gr	er Quality Control coundwater Quality	10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE				
Stan	<b>dards</b> 4.21.11	40.0	40.0	10.0	-11.0	10.10	-1.0				
		<2.0	<2.0	<2.0	<4.0	<0.10	<1.0				
	6.21.11	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0				
	9.22.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.13.11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	3.20.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	9.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.17.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	3.25.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	6.27.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	10.21.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	12.12.13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	4.17.14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0				
	11.6.14	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.28.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
MW-17	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.25.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.7.16	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	12.7.17	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.1.18	<1.0	<1.0	<1.0	<1.5	NA	NA				
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA				
	2.4.20	<1.0	<1.0	<1.0	<2.0	NA	NA				
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	11.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA				
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA				
	11.20.23	<1.0	<1.0	<1.0	<2.0	NA	NA				

	TABLE 1  Lateral K-51 Pipeline Release (2010)  GROUNDWATER ANALYTICAL SUMMARY									
Sample I.D.	Date	Benzene (μg/L)	Toluene (μg/L)	Ethylbenzene (μg/L)	Xylenes (μg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)			
Commmission Gr	New Mexico Water Quality Control Commmission Groundwater Quality Standards		750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE			
	3.20.12		<1.0	<1.0	<2.0	<0.050	<1.0			
	6.19.12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	9.20.12*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0			
	12.17.12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0			
	3.25.13	NS	NS	NS	NS	NS	NS			
	6.27.13	NS	NS	NS	NS	NS	NS			
	10.21.13	NS	NS	NS	NS	NS	NS			
	12.12.13	NS	NS	NS	NS	NS	NS			
	4.17.14	NS	NS	NS	NS	NS	NS			
	11.6.14	NS	NS	NS	NS	NS	NS			
	5.29.15	NS	NS	NS	NS	NS	NS			
	11.30.15	NS	NS	NS	NS	NS	NS			
	5.25.16	NS	NS	NS	NS	NS	NS			
MW-18	11.7.16	NS	NS	NS	NS	NS	NS			
IVIVV-10	5.26.17	NS	NS	NS	NS	NS	NS			
	12.07.17	NS	NS	NS	NS	NS	NS			
	5.30.18	NS	NS	NS	NS	NS	NS			
	11.1.18	NS	NS	NS	NS	NS	NS			
	9.20.19	NS	NS	NS	NS	NS	NS			
	1.31.20	NS	NS	NS	NS	NS	NS			
	5.8.20	NS	NS	NS	NS	NS	NS			
	11.11.20	NS	NS	NS	NS	NS	NS			
	5.28.21	NS	NS	NS	NS	NS	NS			
	11.22.21	NS	NS	NS	NS	NS	NS			
	5.19.22		NS	NS	NS	NS	NS			
	11.8.22	NS	NS	NS	NS	NS	NS			
	5.26.23	<1.0	<1.0	<1.0	<2.0	NA	NA			
	11.20.23	NS	NS	NS	NS	NS	NS			

TABLE 1											
	Lateral K-51 Pipeline Release (2010) GROUNDWATER ANALYTICAL SUMMARY										
	Date			_			TPH				
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO				
						(mg/L)	(mg/L)				
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE				
	3.20.12	250	56	310	3,900	16	5.3				
	6.19.12	NAPL	NAPL	NAPL	NAPL	NA	NA				
	9.19.12	NAPL	NAPL	NAPL	NAPL	NA	NA				
	12.17.12	180	<5.0	5.4	23	2.2	2.6				
	3.25.13	160	<5.0	17	<10	1.5	1.4				
	6.27.13	390	<1.0	79	66	2.7	5.9				
	10.22.13	140	<1.0	<1.0	<2.0	0.51	2.1				
	12.16.13	160	<1.0	37	12	1.4	4.2				
	4.18.14	230	<1.0	41	53	2.2	10				
	11.6.14	260	<1.0	75	42	NA	NA				
	5.29.15	190	<1.0	7.2	81	NA	NA				
	12.1.15	210	<1.0	75	23	NA	NA				
	5.26.16	260	<1.0	86	340	NA	NA				
MW-19	11.8.16	270	<1.0	80	190	NA	NA				
WWV-13	5.30.17	270	<1.0	88	640	NA	NA				
	12.7.17	180	<1.0	70	150	NA	NA				
	5.31.18	250	<10	83	260	NA	NA				
	11.2.18	230	<5.0	62	280	NA	NA				
	9.25.19	340	<5.0	88	380	NA	NA				
	2.4.20	100	<5.0	51	28	NA	NA				
	5.11.20	97	<5.0	54	15	NA	NA				
	11.12.20	240	<2.0	80	50	NA	NA				
	5.28.21	120	<5.0	63	19	NA	NA				
	11.22.21	160	<5.0	85	14	NA	NA				
	5.20.22		<5.0	54	29	NA	NA				
	11.8.22	78	<2.0	34	3.2	NA	NA				
	5.25.23	57	<5.0	20	<10	NA	NA				
	11.20.23	200	<2.0	41	<4.0	NA	NA				



			TABLE	1		TABLE 1										
				Release (2010)												
		GROUNDW	ATER ANALY	TICAL SUMMAR	<u>Y</u>											
	Date	Benzene	Toluene	Ethylbenzene	Xylenes	TPH	TPH									
Sample I.D.		(μg/L)	(μg/L)	(μg/L)	(μg/L)	GRO	DRO									
						(mg/L)	(mg/L)									
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10 <sup>A</sup>	750 <sup>A</sup>	750 <sup>A</sup>	620 <sup>A</sup>	NE	NE									
	3.20.12	35	<1.0	1.1	3.3	0.14	<1.0									
	6.19.12	3.4	<1.0	<1.0	<2.0	<0.050	<1.0									
	9.20.12*	4.7	<1.0	<1.0	<2.0	<0.050	<1.0									
	12.17.12*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0									
	3.25.13*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0									
	6.27.13*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0									
	10.22.13*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0									
	12.16.13*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0									
	4.18.14*	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0									
	11.6.14*	<1.0	<1.0	<1.0	<2.0	NA	NA									
	5.29.15	<1.0	<1.0	<1.0	<2.0	NA	NA									
	12.1.15	<1.0	<1.0	<1.0	<2.0	NA	NA									
	5.26.16	<1.0	<1.0	<1.0	<2.0	NA	NA									
MW-20	11.7.16	<1.0	<1.0	<1.0	<2.0	NA	NA									
WWV-20	5.30.17	<1.0	<1.0	<1.0	<1.5	NA	NA									
	12.7.17	<1.0	<1.0	<1.0	<1.5	NA	NA									
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA									
	11.2.18	<1.0	<1.0	<1.0	<1.5	NA	NA									
	9.25.19	<1.0	<1.0	<1.0	<2.0	NA	NA									
	1.31.20	<1.0	<1.0	<1.0	<2.0	NA	NA									
	5.11.20	<1.0	<1.0	<1.0	<1.5	NA	NA									
	11.12.20	<1.0	<1.0	<1.0	<1.5	NA	NA									
	5.28.21	<1.0	<1.0	<1.0	<2.0	NA	NA									
	11.22.21	<1.0	<1.0	<1.0	<1.5	NA	NA									
	5.20.22	<1.0	<1.0	<1.0	<1.5	NA	NA									
	11.8.22	<1.0	<1.0	<1.0	<1.5	NA	NA									
	5.26.23	<1.0	<1.0	<1.0	<2.0	NA	NA									
	11.20.23	<1.0	<1.0	<1.0	<2.0	NA	NA									

Note: Concentrations in bold and yellow exceed the WQCC GQS that was applicable when remediation was initiated.

μ g/L= micrograms per liter

mg/L= milligrams per liter

NA = Not Analyzed

NS = Not Sampled

NE = Not Established

NAPL = Non-aqueous phase liquid

\* = piezometer well was replaced with associated monitoring well

NAPL = Non-aqueous phase liquid

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

A = NMAC 20.6.2 was amended (12/21/18). The New Mexico EMNRD OCD has not responded to Enterprise's inquiries regarding which closure standards will apply to this legacy site. Therefore, this table reflects the groundwater quality standards that were applicable at the time of initial remediation.

<sup>&</sup>lt;sup>B</sup> = This monitoring well was not sampled during this sampling event. On June 8, 2020 the New Mexico EMNRD OCD approved Enterprise's request to reduce sampling events in MW-3, MW-11, MW-12, and MW-13 to annually.

<sup>\* =</sup> Monitoring well purged/sampled utilizing disposable bailer during this event

<sup>&</sup>lt;sup>C</sup> = This well was sampled, but the anomolous elevation suggests that the sampled water represents subsurface water that was trapped above the collapsed screen due to the recent high amounts of precipitation.

				TABLE 2				
			Lateral K-5	1 Pipeline Rel	ease (2010)			
			GROUN	DWATER ELEV	ATIONS			
Well I.D.	Date	Depth to	Depth to	Product	Total Depth of	Screen	TOC Elevation	
		Product	Water	Thickness	Well	Interval		Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	11.80	ND				6289.09
	6.21.11	ND	12.16	ND				6288.73
	9.22.11	ND	12.92	ND				6287.97
	12.13.11	ND	12.45	ND				6288.44
	3.20.12	ND	12.13	ND		6288.76		
	6.19.12	ND	12.76	ND				6288.13
	9.19.12	ND	13.10	ND				6287.79
	12.17.12	ND	12.33	ND				6288.56
	3.15.13	ND	11.88	ND				6289.01
	6.27.13	ND	12.61	ND				6288.28
	10.22.13	ND	11.71	ND				6289.18
	12.12.13	ND	11.35	ND				6289.54
	4.18.14	ND	11.04	ND				6289.85
	11.6.14	ND	11.56	ND				6289.33
	5.28.15	ND	10.86	ND				6290.03
MW-1	11.30.15	ND	10.90	ND	17.71	7.71-17.71	6300.89	6289.99
1010 0 - 1	5.25.16	ND	10.52	ND	17.71	7.7 1-17.7 1	0300.69	6290.37
	11.07.16	ND	11.42	ND				6289.47
	5.26.17	ND	10.41	ND				6290.48
	12.06.17	ND	10.53	ND				6290.36
	5.30.18	ND	10.67	ND				6290.22
	11.01.18	ND	11.59	ND				6289.30
	9.20.19	ND	12.08	ND				6288.81
	1.31.20	ND	11.13	ND				6289.76
	5.8.20	ND	10.81	ND				6290.08
	11.11.20	ND	11.55	ND				6289.34
	5.28.21	ND	10.92	ND			6289.97	
	11.22.21	ND	11.69	ND				6289.20
	5.19.22	ND	10.86	ND				6290.03
	11.8.22	ND	9.88	ND				6291.01
	5.25.23	ND	9.14	ND				6291.75
	11.20.23	ND	10.79	ND				6290.10

				TABLE 2				
			Lateral K-5	1 Pipeline Rel	ease (2010)			
			GROUN	DWATER ELEV	ATIONS			
Well I.D.	Date	Depth to	Depth to	Product	Total Depth of		TOC Elevation	
		Product	Water	Thickness	Well	Interval		Elevation*
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)
	4.21.11	ND	10.55	ND				6289.27
	6.21.11	ND	11.87	ND				6287.95
	9.22.11	ND	11.86	ND				6287.96
	12.13.11	ND	11.38	ND				6288.44
	3.20.12	ND	10.95	ND				6288.87
	6.19.12	ND	11.64	ND				6288.18
	9.19.12	ND	12.10	ND				6287.72
	12.17.12	ND	11.23	ND				6288.59
	3.15.13	ND	10.65	ND				6289.17
	6.27.13	ND	11.44	ND				6288.38
	10.21.13	ND	10.44	ND				6289.38
	12.12.13	ND	10.09	ND				6289.73
	4.17.14	ND	9.73	ND				6290.09
	11.6.14	ND	10.33	ND				6289.49
	5.28.15	ND	9.61	ND				6290.21
MW-2	11.30.15	ND	9.67	ND	18.45	8.45-18.45	6299.82	6290.15
IVIVV-Z	5.25.16	ND	9.34	ND	10.43	0.43-10.43	0233.02	6290.48
	11.07.16	ND	10.24	ND				6289.58
	5.26.17	ND	9.23	ND				6290.59
	12.06.17	ND	9.33	ND				6290.49
	5.30.18	ND	9.46	ND				6290.36
	11.01.18	ND	10.43	ND				6289.39
	9.20.19	ND	10.95	ND				6288.87
	1.31.20	ND	9.91	ND				6289.91
	5.8.20	ND	9.55	ND				6290.27
	11.11.20	ND	10.35	ND				6289.47
	5.28.21	ND	9.68	ND				6290.14
	11.22.21	ND	10.53	ND				6289.29
	5.19.22	ND	9.62	ND				6290.20
	11.8.22	ND	8.68	ND				6291.14
	5.25.23	ND	8.00	ND				6291.82
	11.20.23	ND	9.60	ND				6290.22

	TABLE 2 Lateral K-51 Pipeline Release (2010)											
				1 Pipeline Rei DWATER ELEV								
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*				
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)				
		,	,		, ,	,						
	4.21.11	ND	11.30	ND				6288.92				
	6.21.11	ND	11.64	ND				6288.58				
	9.22.11	ND	12.45	ND				6287.77				
	12.13.11	ND	11.89	ND				6288.33				
	3.20.12	ND	11.60	ND				6288.62				
	6.19.12	ND	12.22	ND				6288.00				
	9.19.12	ND	12.53	ND				6287.69				
	12.17.12	ND	11.75	ND				6288.47				
	3.15.13	ND	11.37	ND				6288.85				
	6.27.13	ND	12.06	ND				6288.16				
	10.21.13	ND	11.12	ND		Ī	6289.10					
	12.12.13	ND	10.84	ND				6289.38				
	4.17.14	ND	10.55	ND				6289.67				
	11.6.14	ND	11.02	ND				6289.20				
	5.28.15	ND	10.37	ND				6289.85				
MW-3	11.30.15	ND	10.40	ND	18.39	8.39-18.39	6300.22	6289.82				
10100-3	5.25.16	ND	10.10	ND	16.39	0.39-10.39	0300.22	6290.12				
	11.07.16	ND	10.90	ND				6289.32				
	5.26.17	ND	10.00	ND				6290.22				
	12.06.17	ND	10.05	ND				6290.17				
	5.30.18	ND	10.14	ND				6290.08				
	11.01.18	ND	11.07	ND				6289.15				
	9.20.19	ND	11.53	ND				6288.69				
	1.31.20	ND	10.62	ND				6289.60				
	5.11.20	ND	10.31	ND				6289.91				
	11.11.20	ND	11.03	ND				6289.19				
	5.28.21	ND	10.42	ND				6289.80				
	11.22.21	ND	11.16	ND				6289.06				
	5.19.22	ND	10.34	ND				6289.88				
	11.8.22	ND	9.38	ND				6290.84				
	5.25.23	ND	8.68	ND				6291.54				
	11.20.23	ND	10.29	ND				6289.93				

			Latauri IV. 5	TABLE 2	(2040)		TABLE 2 Lateral K-51 Pipeline Release (2010)										
				DWATER ELEV													
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*									
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)									
		,	(		,	,	,	( ) )									
	4.21.11	ND	11.90	ND				6289.01									
	6.21.11	ND	12.18	ND				6288.73									
	9.22.11	ND	12.90	ND				6288.01									
	12.13.11	ND	12.41	ND				6288.50									
	3.20.12	ND	12.45	ND				6288.46									
	6.19.12	ND	12.72	ND				6288.19									
	9.19.12	ND	13.09	ND				6287.82									
	12.17.12	ND	12.33	ND				6288.58									
	3.15.13	ND	11.85	ND				6289.06									
	6.27.13	ND	12.60	ND			6288.31										
	10.22.13	ND	11.74	ND				6289.17									
	12.12.13	ND	11.37	ND				6289.54									
	4.17.14	ND	11.05	ND				6289.86									
	11.6.14	ND	11.58	ND				6289.33									
	5.28.15	ND	10.91	ND		9.47-19.47		6290.00									
MW-4	11.30.15	ND	10.94	ND	19.47		6300.91	6289.97									
10100-4	5.25.16	ND	10.59	ND	19.47	9.47-19.47	0300.91	6290.32									
	11.07.16	ND	11.43	ND				6289.48									
	5.26.17	ND	10.47	ND				6290.44									
	12.06.17	ND	10.60	ND				6290.31									
	5.30.18	ND	10.69	ND				6290.22									
	11.01.18	ND	11.58	ND				6289.33									
	9.20.19	ND	12.04	ND				6288.87									
	1.31.20	ND	11.14	ND				6289.77									
	5.8.20	ND	10.83	ND				6290.08									
	11.11.20	ND	11.54	ND				6289.37									
	5.28.21	ND	10.98	ND				6289.93									
	11.22.21	ND	11.66	ND				6289.25									
	5.19.22	ND	10.89	ND				6290.02									
	11.8.22	ND	9.87	ND				6291.04									
	5.25.23	ND	9.10	ND				6291.81									
	11.20.23	ND	10.71	ND				6290.20									

				TABLE 2								
	Lateral K-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS											
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*				
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)				
		,	,		, ,	,						
	4.21.11	ND	11.98	ND				6289.21				
	6.21.11	ND	12.40	ND				6288.79				
	9.22.11	ND	13.07	ND				6288.12				
	12.13.11	ND	12.55	ND				6288.64				
	3.20.12	ND	12.26	ND				6288.93				
	6.19.12	ND	12.93	ND				6288.26				
	9.19.12	ND	13.27	ND				6287.92				
	12.17.12	ND	12.51	ND				6288.68				
	3.15.13	ND	12.05	ND				6289.14				
	6.27.13	ND	12.82	ND				6288.37				
	10.21.13	ND	11.94	ND				6289.25				
	12.12.13	ND	11.61	ND				6289.58				
	4.17.14	ND	11.25	ND	_			6289.94				
	11.6.14	ND	11.80	ND				6289.39				
	5.28.15	ND	11.12	ND				6290.07				
MW-11	11.30.15	ND	11.18	ND	19.07	9.07-19.07	6301.19	6290.01				
10100-11	5.25.16	ND	10.79	ND	19.07	9.07-19.07	0301.19	6290.40				
	11.07.16	ND	11.66	ND				6289.53				
	5.26.17	ND	10.66	ND				6290.53				
	12.06.17	ND	10.82	ND				6290.37				
	5.30.18	ND	10.88	ND				6290.31				
	11.01.18	ND	11.82	ND				6289.37				
	9.20.19	ND	12.26	ND				6288.93				
	1.31.20	ND	11.39	ND				6289.80				
	5.8.20	ND	11.07	ND				6290.12				
	11.11.20	ND	11.79	ND				6289.40				
	5.28.21	ND	11.24	ND				6289.95				
	11.22.21	ND	11.92	ND				6289.27				
	5.19.22	ND	11.16	ND				6290.03				
	11.8.22	ND	10.09	ND				6291.10				
	5.25.23	ND	9.26	ND				6291.93				
	11.20.23	ND	11.04	ND				6290.15				

				TABLE 2							
	Lateral K-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS										
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*			
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)			
		,	,		,	,	,				
	4.21.11	ND	8.96	ND				6290.12			
	6.21.11	ND	9.42	ND				6289.66			
	9.22.11	ND	10.82	ND				6288.26			
	12.13.11	ND	10.13	ND				6288.95			
	3.20.12	ND	9.41	ND				6289.67			
	6.19.12	ND	10.09	ND				6288.99			
	9.19.12	ND	11.03	ND				6288.05			
	12.17.12	ND	10.21	ND				6288.87			
	3.15.13	ND	9.26	ND				6289.82			
	6.27.13	ND	9.99	ND				6289.09			
	10.21.13	ND	9.09	ND				6289.99			
	12.12.13	ND	8.78	ND				6290.30			
	4.17.14	ND	8.44	ND				6290.64			
	11.6.14	ND	9.05	ND				6290.03			
	5.28.15	ND	8.34	ND				6290.74			
MW-12	11.30.15	ND	8.44	ND	18.03	8.03-18.03	6299.08	6290.64			
IVIVV - 12	5.25.16	ND	8.11	ND	16.03	0.03-10.03	6299.06	6290.97			
	11.07.16	ND	8.87	ND				6290.21			
	5.26.17	ND	8.01	ND				6291.07			
	12.06.17	ND	8.12	ND				6290.96			
	5.30.18	ND	8.27	ND				6290.81			
	11.01.18	ND	9.17	ND				6289.91			
	9.20.19	ND	9.68	ND				6289.40			
	1.31.20	ND	8.71	ND				6290.37			
	5.8.20	ND	8.34	ND				6290.74			
	11.11.20	ND	9.10	ND				6289.98			
	5.28.21	ND	8.48	ND				6290.60			
	11.22.21	ND	9.30	ND				6289.78			
	5.19.22	ND	8.43	ND				6290.65			
	11.8.22	ND	7.48	ND				6291.60			
	5.25.23	ND	6.82	ND				6292.26			
	11.20.23	ND	8.41	ND				6290.67			

	TABLE 2  Lateral K-51 Pipeline Release (2010)  GROUNDWATER ELEVATIONS										
			GROUN	DWATER ELE\	/ATIONS						
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*			
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)			
	4.21.11	ND	9.07	ND				6289.20			
	6.21.11	ND	9.51	ND				6288.76			
	9.22.11	ND	10.15	ND				6288.12			
	12.13.11	ND	9.59	ND	1			6288.68			
	3.20.12	ND	9.35	ND	1			6288.92			
	6.19.12	ND	10.09	ND	1			6288.18			
	9.19.12	ND	10.29	ND	1			6287.98			
	12.17.12	ND	9.47	ND	1			6288.80			
	3.15.13	ND	9.11	ND	1			6289.16			
	6.27.13	ND	9.94	ND		7.00.47.00		6288.33			
	10.21.13	ND	8.91	ND				6289.36			
	12.12.13	ND	8.57	ND	1			6289.70			
	4.17.14	ND	8.39	ND				6289.88			
	11.6.14	ND	8.83	ND				6289.44			
	5.28.15	ND	8.32	ND				6289.95			
NAVA 40	11.30.15	ND	8.21	ND	17.00		6298.27	6290.06			
MW-13	5.25.16	ND	8.01	ND	17.90	7.90-17.90	6298.27	6290.26			
	11.07.16	ND	8.67	ND	1			6289.60			
	5.26.17	ND	7.83	ND	1			6290.44			
	12.06.17	ND	7.90	ND	1			6290.37			
	5.30.18	ND	8.08	ND	1			6290.19			
	11.01.18	ND	8.84	ND	1			6289.43			
	9.20.19	ND	9.36	ND	1			6288.91			
	1.31.20	ND	8.40	ND	1			6289.87			
	5.11.20	ND	8.17	ND	1			6290.10			
	11.11.20	ND	8.82	ND	1			6289.45			
	5.28.21	ND	8.29	ND	1			6289.98			
	11.22.21	ND	8.93	ND	1			6289.34			
	5.19.22	ND	8.18	ND	1			6290.09			
	11.8.22	ND	7.24	ND	1			6291.03			
	5.25.23	ND	6.59	ND	1			6291.68			
	11.20.23	ND	8.15	ND	1			6290.12			

	TABLE 2  Lateral K-51 Pipeline Release (2010)										
	GROUNDWATER ELEVATIONS										
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*			
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)			
	4.21.11	ND	12.54	ND				6288.66			
	6.21.11	ND	12.88	ND	1			6288.32			
	9.22.11	ND	13.53	ND	1			6287.67			
	12.13.11	ND	13.11	ND	1			6288.09			
	3.20.12	ND	12.80	ND	1			6288.40			
	6.19.12	ND	13.42	ND				6287.78			
	9.19.12	ND	13.70	ND	1			6287.50			
	12.17.12	ND	12.93	ND	1			6288.27			
	3.15.13	ND	12.55	ND	1			6288.65			
	6.27.13	ND	13.26	ND		0.00.40.00		6287.94			
	10.22.13	ND	12.39	ND	1			6288.81			
	12.12.13	ND	12.06	ND				6289.14			
	4.18.14	ND	11.79	ND				6289.41			
	11.6.14	ND	12.23	ND				6288.97			
	5.28.15	ND	11.67	ND				6289.53			
MW-14	11.30.15	ND	11.62	ND	18.88		6301.20	6289.58			
10100-14	5.25.16	ND	11.35	ND	10.00	8.88-18.88	0301.20	6289.85			
	11.07.16	ND	12.09	ND	1			6289.11			
	5.26.17	ND	11.24	ND	1			6289.96			
	12.06.17	ND	11.27	ND	1			6289.93			
	5.30.18	ND	11.36	ND	1			6289.84			
	11.01.18	ND	12.23	ND	1			6288.97			
	9.20.19	ND	12.68	ND	1			6288.52			
	1.31.20	ND	11.78	ND	1			6289.42			
	5.11.20	ND	11.54	ND	1			6289.66			
	11.11.20	ND	12.19	ND	1			6289.01			
	5.28.21	ND	11.65	ND	1			6289.55			
	11.22.21	ND	12.29	ND	1			6288.91			
	5.19.22	ND	11.57	ND	1			6289.63			
	11.8.22	ND	10.60	ND				6290.60			
	5.25.23	ND	9.88	ND	1			6291.32			
	11.20.23	ND	11.46	ND				6289.74			

	TABLE 2  Lateral K-51 Pipeline Release (2010)											
	GROUNDWATER ELEVATIONS											
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*				
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)				
	4.21.11	ND	12.06	ND				6287.83				
	6.21.11	ND	12.26	ND	1			6287.63				
	9.22.11	ND	12.57	ND	1			6287.32				
	12.13.11	ND	12.28	ND	1			6287.61				
	3.20.12	ND	12.24	ND	1			6287.65				
	6.19.12	ND	12.71	ND				6287.18				
	9.19.12	ND	12.80	ND	1			6287.09				
	12.17.12	ND	11.90	ND	1			6287.99				
	3.15.13	ND	11.80	ND	1			6288.09				
	6.27.13	ND	12.37	ND				6287.52				
	10.21.13	ND	11.32	ND	1			6288.57				
	12.12.13	ND	10.92	ND				6288.97				
	4.17.14	ND	10.76	ND				6289.13				
	11.6.14	ND	10.99	ND				6288.90				
	5.28.15	ND	10.56	ND				6289.33				
MW-16	11.30.15	ND	10.39	ND	18.01	8.01-18.01	6299.89	6289.50				
10100-10	5.25.16	ND	10.10	ND	16.01	0.01-10.01	0299.69	6289.79				
	11.07.16	ND	10.86	ND	1			6289.03				
	5.26.17	ND	10.02	ND	1			6289.87				
	12.06.17	ND	10.01	ND	1			6289.88				
	5.30.18	ND	10.11	ND	1			6289.78				
	11.01.18	ND	11.02	ND				6288.87				
	9.20.19	ND	11.35	ND				6288.54				
	1.31.20	ND	10.60	ND	1			6289.29				
	5.11.20	ND	10.32	ND	1			6289.57				
	11.11.20	ND	10.96	ND				6288.93				
	5.28.21	ND	10.36	ND				6289.53				
	11.22.21 <sup>A</sup>	ND	11.57	ND	1			6288.32				
	5.19.22	ND	10.17	ND	1			6289.72				
	11.8.22	ND	9.28	ND	<b>-</b>			6290.61				
	5.25.23	ND	8.64	ND				6291.25				
	11.20.23	ND	10.22	ND				6289.67				

	TABLE 2 Lateral K-51 Pipeline Release (2010)										
	GROUNDWATER ELEVATIONS										
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*			
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)			
	4.21.11	ND	9.90	ND				6288.67			
	6.21.11	ND	9.56	ND				6289.01			
	9.22.11	ND	10.83	ND				6287.74			
	12.13.11	ND	10.31	ND				6288.26			
	3.20.12	ND	10.12	ND				6288.45			
	6.19.12	ND	10.81	ND				6287.76			
	9.19.12	ND	10.95	ND				6287.62			
	12.17.12	ND	10.13	ND				6288.44			
	3.15.13	ND	9.85	ND				6288.72			
	6.27.13	ND	10.62	ND				6287.95			
	10.21.13	ND	9.61	ND				6288.96			
	12.12.13	ND	9.28	ND				6289.29			
	4.17.14	ND	9.13	ND				6289.44			
	11.6.14	ND	9.47	ND				6289.10			
	5.28.15	ND	9.00	ND				6289.57			
MW-17	11.30.15	ND	8.87	ND	18.16	8.16-18.16	6298.57	6289.70			
10100-17	5.25.16	ND	8.65	ND	10.10	0.10-10.10	0290.57	6289.92			
	11.07.16	ND	9.32	ND				6289.25			
	5.26.17	ND	8.56	ND				6290.01			
	12.06.17	ND	8.52	ND				6290.05			
	5.30.18	ND	8.68	ND				6289.89			
	11.01.18	ND	9.48	ND				6289.09			
	9.20.19	ND	9.97	ND				6288.60			
	1.31.20	ND	9.05	ND				6289.52			
	5.11.20	ND	8.83	ND				6289.74			
	11.11.20	ND	9.45	ND				6289.12			
	5.28.21	ND	8.91	ND				6289.66			
	11.22.21	ND	9.56	ND				6289.01			
	5.19.22	ND	8.81	ND				6289.76			
	11.8.22	ND	7.82	ND				6290.75			
	5.25.23	ND	7.17	ND				6291.40			
	11.20.23	ND	8.76	ND				6289.81			

	TABLE 2 Lateral K-51 Pipeline Release (2010)									
				1 Pipeline Rel IDWATER ELE\						
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*		
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)		
	3.20.12	ND	16.60	ND				6288.17		
	6.19.12	ND	17.42	ND				6287.35		
	9.19.12	ND	17.45	ND				6287.32		
	12.17.12	ND	16.73	ND				6288.04		
	3.15.13		Blockage					Blockage		
	6.27.13		Blockage					Blockage		
	10.22.13		Blockage		1			Blockage		
	12.12.13		Blockage		1			Blockage		
	4.17.14		Blockage		1			Blockage		
	11.6.14		Blockage		1			Blockage		
	5.28.15		Blockage		1			Blockage		
	11.30.15		Blockage		1			Blockage		
	5.25.16	Blockage			1			Blockage		
NAV 40	11.07.16		Blockage		1	NIA	0004.77	Blockage		
MW-18	5.26.17	ND	15.12	ND	NA NA	NA	6304.77	6289.65		
	12.06.17	ND	15.31	ND	1			6289.46		
	5.30.18		Blockage		1			Blockage		
	11.01.18		Blockage		1			Blockage		
	9.20.19		Blockage		1			Blockage		
	1.31.20		Blockage		1			Blockage		
	5.8.20		Blockage		1			Blockage		
	11.11.20		Blockage		1			Blockage		
	5.28.21		Blockage		1			Blockage		
	11.22.21		Blockage		1			Blockage		
	5.19.22		Blockage		1			Blockage		
	11.8.22		Blockage		1			Blockage		
	5.25.23 <sup>C</sup>	ND	13.98	ND	1			6284.59		
	11.20.23		Blockage		1			Blockage		

	TABLE 2										
			Lateral K-5	1 Pipeline Rel	ease (2010)						
			GROUN	DWATER ELEV	ATIONS						
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*			
		(feet BTOC)	(feet BTOC)		(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)			
	3.20.12	ND	15.69	ND				6288.11			
	6.19.12 <sup>B</sup>	16.25	16.32	0.07				6287.52			
	9.19.12 <sup>B</sup>	16.47	16.49	0.02	1			6287.32			
	12.17.12	ND	15.91	ND				6287.89			
	3.15.13	ND	15.38	ND				6288.42			
	6.27.13	ND	16.19	ND				6287.61			
	10.22.13	ND	15.13	ND				6288.67			
	12.12.13	ND	14.78	ND	1			6289.02			
	4.18.14	ND	14.68	ND				6289.12			
	11.6.14	ND	14.99	ND				6288.81			
	5.28.15	ND	14.60	ND				6289.20			
	11.30.15	ND	14.38	ND				6289.42			
	5.25.16	ND	14.28	ND				6289.52			
MMA/ 10	11.07.16	ND	14.83	ND	22.22	12 22 22 22	6202.00	6288.97			
MW-19	5.26.17	ND	14.20	ND	23.22	13.22-23.22	6303.80	6289.60			
	12.06.17	ND	14.08	ND				6289.72			
	5.30.18	ND	14.27	ND				6289.53			
	11.01.18	ND	15.00	ND	1			6288.80			
	9.20.19	ND	15.47	ND				6288.33			
	1.31.20	ND	14.56	ND				6289.24			
	5.11.20	ND	14.40	ND				6289.40			
	11.11.20	ND	14.98	ND				6288.82			
	5.28.21	ND	14.53	ND				6289.27			
	11.22.21	ND	15.05	ND				6288.75			
	5.19.22	ND	14.40	ND				6289.40			
	11.8.22	ND	13.48	ND				6290.32			
	5.25.23	ND	12.67	ND				6291.13			
	11.20.23	ND	14.30	ND				6289.50			



TABLE 2												
	Lateral K-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS											
Well I.D.	Date	Depth to Product	Depth to Water	Product Thickness	Total Depth of Well	Screen Interval	TOC Elevation	Groundwater Elevation*				
		(feet BTOC)	(feet BTOC)	111101111000	(feet BTOC)	(feet BTOC)	(feet AMSL)	(feet AMSL)				
		(leet B100)	(leet B100)		(leet B100)	(leet b 100)	(reet AWOL)	(IGEL AMOL)				
	3.20.12	ND	25.82	ND				6286.77				
	6.19.12	ND	26.30	ND				6286.29				
	9.19.12	ND	26.31	ND				6286.28				
	12.17.12	ND	25.42	ND				6287.17				
	3.15.13	ND	25.38	ND				6287.21				
	6.27.13	ND	26.11	ND				6286.48				
	10.22.13	ND	24.98	ND				6287.61				
	12.12.13	ND	24.57	ND				6288.02				
	4.17.14	ND	24.66	ND				6287.93				
	11.6.14	ND	24.81	ND				6287.78				
	5.28.15	ND	24.80	ND				6287.79				
	11.30.15	ND	24.15	ND				6288.44				
	5.25.16	ND	24.28	ND				6288.31				
MW-20	11.07.16	ND	24.48	ND	30.51	20.51-30.51	6312.59	6288.11				
10100-20	5.26.17	ND	24.37	ND	00.01	20.01-00.01	0012.00	6288.22				
	12.06.17	ND	23.95	ND				6288.64				
	5.30.18	ND	24.29	ND				6288.30				
	11.01.18	ND	24.69	ND				6287.90				
	9.20.19	ND	25.35	ND				6287.24				
	1.31.20	ND	24.26	ND				6288.33				
	5.11.20	ND	24.30	ND				6288.29				
	11.11.20	ND	24.73	ND				6287.86				
	5.28.21	ND	24.43	ND				6288.16				
	11.22.21	ND	24.70	ND				6287.89				
	5.19.22	ND	24.17	ND				6288.42				
	11.8.22	ND	23.40	ND				6289.19				
	5.25.23	ND	22.91	ND				6289.68				
	11.20.23	ND	24.10	ND				6288.49				

BTOC - below top of casing

TOC - top of casing

Basis of elevation: As measured at set temporary bench mark (elevation = 6296.14'), as indicated by the professional surveyor.

NA - Not Available

ND - Not Detected

<sup>\* -</sup> corrected for presence of phase-sepated hydrocarbon using a specific gravity correction factor of 0.63. Groundwater elevations at each well are listed in feet above mean sea level (AMSL) as measured from the TOC.

<sup>&</sup>lt;sup>A</sup> - Suspected misgauge.

<sup>&</sup>lt;sup>B</sup> - No visual verification. May not be hydrocarbon.

<sup>&</sup>lt;sup>C</sup> - The anomolous elevation suggests that the gauged water represents subsurface water that was trapped above the collapsed screen due to the recent high amounts of precipitation. This elevation was not used to prepare the potentiometric contours on the associated groundwater gradient map.



# APPENDIX D

Laboratory Data Sheets & Chain of Custody Documentation



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

June 06, 2023

Kyle Summers

**ENSOLUM** 

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral K 51 OrderNo.: 2305D64

### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/26/2023 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

Surr: 4-Bromofluorobenzene

Analytical Report
Lab Order 2305D64

Date Reported: 6/6/2023

5/31/2023 5:30:46 PM

R97131

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-11

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 10:00:00 AM

 Lab ID:
 2305D64-001
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

103

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 1.0 μg/L 5/31/2023 5:30:46 PM R97131 Toluene ND 1.0 μg/L 1 5/31/2023 5:30:46 PM R97131 Ethylbenzene ND 1.0 μg/L 5/31/2023 5:30:46 PM R97131 Xylenes, Total ND 2.0 μg/L 1 5/31/2023 5:30:46 PM R97131

52.4-148

%Rec

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 12

Surr: 4-Bromofluorobenzene

Analytical Report
Lab Order 2305D64

Date Reported: 6/6/2023

5/31/2023 5:54:17 PM

R97131

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-4

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 10:40:00 AM

 Lab ID:
 2305D64-002
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

102

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene 1.1 1.0 μg/L 5/31/2023 5:54:17 PM R97131 Toluene ND 1.0 μg/L 1 5/31/2023 5:54:17 PM R97131 Ethylbenzene ND 1.0 μg/L 5/31/2023 5:54:17 PM R97131 Xylenes, Total 2.4 2.0 μg/L 1 5/31/2023 5:54:17 PM R97131

52.4-148

%Rec

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Not In Range Page 2 of 12

Date Reported: 6/6/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-12

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 11:15:00 AM

 Lab ID:
 2305D64-003
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	5/31/2023 6:17:47 PM	R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 6:17:47 PM	R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 6:17:47 PM	R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 6:17:47 PM	R97131
Surr: 4-Bromofluorobenzene	101	52.4-148	%Rec	1	5/31/2023 6:17:47 PM	R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 12

**CLIENT: ENSOLUM** 

**Analytical Report**Lab Order **2305D64** 

Date Reported: 6/6/2023

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-1

**Project:** Lateral K 51 **Collection Date:** 5/25/2023 11:50:00 AM

**Lab ID:** 2305D64-004 **Matrix:** AQUEOUS **Received Date:** 5/26/2023 6:55:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	5/31/2023 6:41:20 PM	R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 6:41:20 PM	R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 6:41:20 PM	R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 6:41:20 PM	R97131
Surr: 4-Bromofluorobenzene	103	52.4-148	%Rec	1	5/31/2023 6:41:20 PM	R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 12

Date Reported: 6/6/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-2

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 12:15:00 PM

 Lab ID:
 2305D64-005
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

Analyses	Result	RL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	1.0	μg/L	1	5/31/2023 7:04:45 PM	R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 7:04:45 PM	R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 7:04:45 PM	R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 7:04:45 PM	R97131
Surr: 4-Bromofluorobenzene	101	52.4-148	%Rec	1	5/31/2023 7:04:45 PM	R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 12

Date Reported: 6/6/2023

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: ENSOLUM Client Sample ID:** MW-13

Project: Lateral K 51 **Collection Date:** 5/25/2023 12:40:00 PM Lab ID: 2305D64-006 Matrix: AQUEOUS Received Date: 5/26/2023 6:55:00 AM

Analyses	Result	RL Qı	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	5/31/2023 7:28:10 PM	R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 7:28:10 PM	R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 7:28:10 PM	R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 7:28:10 PM	R97131
Surr: 4-Bromofluorobenzene	99.8	52.4-148	%Rec	1	5/31/2023 7:28:10 PM	R97131

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
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits Sample pH Not In Range
- RL Reporting Limit

Page 6 of 12

Date Reported: 6/6/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-17

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 1:05:00 PM

 Lab ID:
 2305D64-007
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	5/31/2023 7:51:33 PM	R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 7:51:33 PM	R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 7:51:33 PM	R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 7:51:33 PM	R97131
Surr: 4-Bromofluorobenzene	98.5	52.4-148	%Rec	1	5/31/2023 7:51:33 PM	R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 12

Date Reported: 6/6/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-3

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 1:30:00 PM

 Lab ID:
 2305D64-008
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

Analyses	Result	RL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	5/31/2023 8:14:57 PM	R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 8:14:57 PM	R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 8:14:57 PM	R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 8:14:57 PM	R97131
Surr: 4-Bromofluorobenzene	99.5	52.4-148	%Rec	1	5/31/2023 8:14:57 PM	R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 12

Date Reported: 6/6/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-16

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 2:05:00 PM

 Lab ID:
 2305D64-009
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 1.0 μg/L 5/31/2023 8:38:16 PM R97131 Toluene ND 1.0 μg/L 1 5/31/2023 8:38:16 PM R97131 Ethylbenzene ND 1.0 μg/L 5/31/2023 8:38:16 PM R97131 Xylenes, Total ND 2.0 μg/L 1 5/31/2023 8:38:16 PM R97131 Surr: 4-Bromofluorobenzene 98.1 52.4-148 %Rec 5/31/2023 8:38:16 PM R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 12

Date Reported: 6/6/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-19

 Project:
 Lateral K 51
 Collection Date: 5/25/2023 2:35:00 PM

 Lab ID:
 2305D64-010
 Matrix: AQUEOUS
 Received Date: 5/26/2023 6:55:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene 57 5.0 D μg/L 6/1/2023 12:33:59 PM BW9713 Toluene ND 5.0 D μg/L 6/1/2023 12:33:59 PM BW9713 Ethylbenzene 20 5.0 D μg/L 5 6/1/2023 12:33:59 PM BW97133 Xylenes, Total ND 10 D μg/L 5 6/1/2023 12:33:59 PM BW9713 Surr: 4-Bromofluorobenzene 104 52.4-148 D %Rec 6/1/2023 12:33:59 PM BW97133

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 12

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2305D64** *06-Jun-23* 

Client: ENSOLUM
Project: Lateral K 51

Sample ID: 100ng btex lcs	Samp1	ype: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW	Batch	n ID: <b>R9</b>	7131	RunNo: 97131						
Prep Date:	Analysis D	Date: <b>5/</b> 3	31/2023	5	SeqNo: 3	526605	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.8	70	130			
Toluene	19	1.0	20.00	0	93.2	70	130			
Ethylbenzene	19	1.0	20.00	0	93.4	70	130			
Xylenes, Total	56	2.0	60.00	0	93.9	70	130			
Surr: 4-Bromofluorobenzene	21		20.00		105	52.4	148			

Sample ID: mb	SampT	ype: <b>ME</b>	BLK	Tes	tCode: EF	Code: EPA Method 8021B: Volatiles						
Client ID: PBW	Batch	n ID: <b>R9</b> '	7131	F	7131							
Prep Date:	Analysis D	ate: <b>5/</b> 3	31/2023	9	SeqNo: 3	526606	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	20		20.00		98.5	52.4	148					

Sample ID: 2305d64-001ams	Samp <sup>-</sup>	SampType: MS TestCode: EPA Method 8021B: Volatiles								
Client ID: MW-11	Batc	h ID: <b>R9</b> '	7131	F	RunNo: 97	7131				
Prep Date:	Analysis [	Date: <b>6/</b>	1/2023	;	SeqNo: 3	526608	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0.4200	88.0	70	130			
Toluene	19	1.0	20.00	0	93.2	70	130			
Ethylbenzene	19	1.0	20.00	0	93.2	70	130			
Xylenes, Total	57	2.0	60.00	0	94.2	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		102	52.4	148			

Sample ID: 2305d64-001amsd	SampT	уре: <b>МЅ</b>	SD.	Tes	8021B: Volatil	es				
Client ID: MW-11	Batch	n ID: <b>R9</b>	7131	F	RunNo: 97131					
Prep Date:	Analysis D	Date: <b>6/</b> *	1/2023	5	SeqNo: 3	526609	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0.4200	86.3	70	130	1.88	20	
Toluene	18	1.0	20.00	0	90.6	70	130	2.83	20	
Ethylbenzene	18	1.0	20.00	0	92.0	70	130	1.39	20	
Xylenes, Total	56	2.0	60.00	0	92.6	70	130	1.67	20	
Surr: 4-Bromofluorobenzene	21		20.00		104	52.4	148	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 Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 11 of 12

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2305D64** *06-Jun-23* 

Client: ENSOLUM
Project: Lateral K 51

Sample ID: 100ng btex lcs	Samp1	Гуре: <b>LC</b>	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW	Batch	h ID: BW	/97133	F	RunNo: 97	7133				
Prep Date:	Analysis D	Date: <b>6/</b>	1/2023	5	SeqNo: 3	528228	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	88.9	70	130			
Toluene	18	1.0	20.00	0	90.8	70	130			
Ethylbenzene	18	1.0	20.00	0	91.1	70	130			
Xylenes, Total	55	2.0	60.00	0	91.5	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		99.1	52.4	148			

Sample ID: mb	SampT	Type: MBLK TestCode: EPA Method 8021B: Volatiles								
Client ID: PBW	Batch	n ID: <b>BW</b>	/97133	F	RunNo: 97133					
Prep Date:	Analysis D	Date: 6/	1/2023	5	SeqNo: 3	528229	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	20		20.00		98.1	52.4	148			

### 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 Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 12

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

## Sample Log-In Check List

Released to Imaging: 8/6/2024 3:47:11 PM

Client Name: El	NSOLUM	Work Order Numb	per: 2305D64		RcptNo:	1
Received By: 1	Tracy Casarrubias	5/26/2023 6:55:00 A	λM			
Completed By: 1	Tracy Casarrubias	5/26/2023 8:02:24 <i>F</i>	λM			
Reviewed By:	U5-26-23					
Chain of Custo	dv					
1. Is Chain of Custo			Yes 🗌	No 🗹	Not Present	
How was the sar			Courier			
Log In						
3. Was an attempt	made to cool the sam	oles?	Yes 🗹	No 🗌	NA 🗌	
4. Were all samples	s received at a temper	ature of >0° C to 6.0°C	Yes 🗹	No 🗌	na 🗆	
5. Sample(s) in pro	oper container(s)?		Yes 🔽	No 🗌		
6. Sufficient sample	volume for indicated	test(s)?	Yes 🗹	No 🗆		
7. Are samples (exc	cept VOA and ONG) pr	roperly preserved?	Yes 🗹	No 🗌		
3. Was preservative	e added to bottles?		Yes 🗌	No 🗹	NA 🗌	
9. Received at least	t 1 vial with headspace	e <1/4" for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	
0 <sub>.</sub> Were any sampl	le containers received	broken?	Yes 🗌	No 🗹	# of preserved	
F -	match bottle labels?	v)	Yes 🔽	No 🗌	bottles checked for pH: (<2 or	>12 unless noted)
	rectly identified on Cha		Yes 🗹	No 🗌	Adjusted?	
	nalyses were requeste		Yes 🗹	No 🗌		12
<del>-</del>	times able to be met? omer for authorization.	)	Yes 🗸	No 🗆	Checked by:	Ju 5/26
pecial Handlin	g (if applicable)			,-		
15. Was client notifi	ed of all discrepancies	with this order?	Yes 🗌	No 🗌	NA 🗹	
Person No	otified:	Date:				
By Whom:		Via:	eMail F	Phone 🗌 Fax	☐ In Person	
Regarding	1					
Client Inst	ructions: Phone num	ber not on COC- TMC 5/25/	23			
16. Additional rema	ırks:					
17. Cooler Informa		Cool Intent   Coulty	Cool Dotal	Cinned D.		
Cooler No	Temp °C Condition 4.7 Good	Seal Intact Seal No Yes Yogi	Seal Date	Signed By		

	HALL ENVIRONMENTAL ANALYSIS LABORATORY	www.ballenvironmental.com	4901 Hawkins NF - Albuquerque NM 82100	 Analysis	**	s'8C	)q  S0	2808 (1.4) 528 -	1 20 ol ol ol ol ol ol ol ol ol	sticicios 831 Meta , NC (AC)	(Weight of the second of the s	3270 3260 21, F, PAHs PAHs 8081	3							The state of the s				25.	+	NI to trooled
Turn-Around Time:	X Standard C Rush	Project Name:	Heral K-D	05A1226010	_	7 (8021		- TME	Jers:	(including CF): 4 4 - 0 2 - 4 3 (°C)	/>		CA 4-C12, 0001	1	X X	7	X	9000	X	X 8000	X	N CIO		Received by: Via: Date Time Remarks:	2/0	received by: Via: County Date Time
hain-of-Custody Record	Client: Eusalam, LC		Mailing Address: KCK S. Publicand Souted	Phone #:	email or Fax#: LEcunsor Sale englance	QA/QC Package:	1	☐ Az Compliance				Date Time Matrix Sample Name	5/2/2 10:00 HD MIN-1:1	1540 1 MM-4	11:15 MW-12	11:50 MW-1	2-MM -2	11:00 MW - 13	1325 MM-17	13:30 MW - 3	Wine In	4 14:35 V		Date: Time: Relinquished by:	Time: Religanished by:	The state of the s

Released to Imaging 10 Hall Engignmental 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.



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

June 01, 2023

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Lateral K 51 OrderNo.: 2305E17

#### Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/27/2023 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

# Analytical Report Lab Order 2305E17

Date Reported: 6/1/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-14

 Project:
 Lateral K 51
 Collection Date: 5/26/2023 11:10:00 AM

 Lab ID:
 2305E17-001
 Matrix: AQUEOUS
 Received Date: 5/27/2023 9:00:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	1.1	1.0	μg/L	1	5/31/2023 10:11:54 PM	I R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 10:11:54 PM	I R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 10:11:54 PM	I R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 10:11:54 PM	R97131
Surr: 4-Bromofluorobenzene	98.0	52.4-148	%Rec	1	5/31/2023 10:11:54 PM	I R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 4

**CLIENT: ENSOLUM** 

### **Analytical Report**

Lab Order **2305E17**Date Reported: **6/1/2023** 

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: MW-18

**Project:** Lateral K 51 **Collection Date:** 5/26/2023 11:45:00 AM

**Lab ID:** 2305E17-002 **Matrix:** AQUEOUS **Received Date:** 5/27/2023 9:00:00 AM

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analy	st: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	5/31/2023 10:35:21 PM	/I R97131
Toluene	ND	1.0	μg/L	1	5/31/2023 10:35:21 PM	/I R97131
Ethylbenzene	ND	1.0	μg/L	1	5/31/2023 10:35:21 PM	/I R97131
Xylenes, Total	ND	2.0	μg/L	1	5/31/2023 10:35:21 PM	/I R97131
Surr: 4-Bromofluorobenzene	97.1	52.4-148	%Rec	1	5/31/2023 10:35:21 PM	/I R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 4

Lab Order **2305E17**Date Reported: **6/1/2023** 

### Hall Environmental Analysis Laboratory, Inc.

-

CLIENT: ENSOLUM Client Sample ID: MW-20

 Project:
 Lateral K 51
 Collection Date: 5/26/2023 12:25:00 PM

 Lab ID:
 2305E17-003
 Matrix: AQUEOUS
 Received Date: 5/27/2023 9:00:00 AM

**Analyses** Result **RL Oual Units DF** Date Analyzed **Batch EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 1.0 μg/L 5/31/2023 10:58:41 PM R97131 Toluene ND 1.0 μg/L 1 5/31/2023 10:58:41 PM R97131 Ethylbenzene ND 1.0 μg/L 5/31/2023 10:58:41 PM R97131 Xylenes, Total ND 2.0 μg/L 1 5/31/2023 10:58:41 PM R97131 Surr: 4-Bromofluorobenzene 97.4 52.4-148 %Rec 5/31/2023 10:58:41 PM R97131

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 4

## **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2305E17** *01-Jun-23* 

Client: ENSOLUM
Project: Lateral K 51

Sample ID: 100ng btex Ics	Samp	Гуре: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSW	Batcl	Batch ID: <b>R97131</b> RunNo: <b>97131</b>										
Prep Date:	Analysis [	Date: <b>5/</b> 3	31/2023	SeqNo: <b>3526605</b>			Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	18	1.0	20.00	0	89.8	70	130					
Toluene	19	1.0	20.00	0	93.2	70	130					
Ethylbenzene	19	1.0	20.00	0	93.4	70	130					
Xylenes, Total	56	2.0	60.00	0	93.9	70	130					
Surr: 4-Bromofluorobenzene	21		20.00		105	52.4	148					

Sample ID: <b>mb</b>	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBW	Batch	1D: <b>R9</b>	7131	F	RunNo: 97	7131				
Prep Date:	Analysis Date: 5/31/2023 SeqNo: 3526606		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	20		20.00		98.5	52.4	148			

#### 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 Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 4



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

# Sample Log-In Check List

Released to Imaging: 8/6/2024 3:47:11 PM

			Website: www.	nanenvir	onmen	itii.Com			
Client Name: ENSOLUM		Work	Order Numb	er: 2305	E17			RcptN	lo: 1
Received By: Tracy Cas	arrubias	5/27/20	)23 9:00:00 A	M					
Completed By: Tracy Cas			23 10:48:16						
		3/2//20	23 10.40.10	Z-CIA1					
Reviewed By. 7n5/5	30/23								
Chain of Custody									
1. Is Chain of Custody compl	ete?			Yes		No	V	Not Present	
2. How was the sample delive	ered?			Cour	<u>ier</u>				
Log In									
3. Was an attempt made to c	ool the samples	?		Yes	<b>V</b>	No		NA 🗀	
4. Were all samples received	at a temperatui	e of >0° C	to 6.0°C	Yes	<b>V</b>	No		NA [	
5. Sample(s) in proper contai	ner(e\?			Yes		No	П		
The Campio(o) in proper contain	1101(3):			103	•	110			
6. Sufficient sample volume for	or indicated test	(s)?		Yes	<b>V</b>	No			
7. Are samples (except VOA	and ONG) prope	erly preserve	ed?	Yes	<b>✓</b>	No			
8. Was preservative added to	bottles?			Yes		No	<b>✓</b>	NA 🗌	
9. Received at least 1 vial with	n headspace <1	/4" for AQ \	/OA?	Yes	<b>V</b>	No		na 🗀	
10. Were any sample containe	rs received brol	ken?		Yes		No	V		
11. Does paperwork match bot (Note discrepancies on cha				Yes	<b>✓</b>	No		# of preserved bottles checked for pH:	or >12 unless noted)
2. Are matrices correctly ident		of Custody?		Yes	<b>V</b>	No		Adjusted?	
13. Is it clear what analyses we		•		Yes		No			
<ol> <li>Were all holding times able (If no, notify customer for a</li> </ol>				Yes	<b>✓</b>	No	9	Checked by:	TIME 5/27/2
Special Handling (if app	-					•			
15. Was client notified of all di		h this order	?	Yes		No		NA 🗹	
Person Notified:		-	Date:	ı ———			and the same of		
By Whom:		V	Via:	¯ ☐ eMa	il 🗌	Phone [	Fax	In Person	
Regarding:	to a second	Andrews established		evi Augusta en en		-	n-toreanours	CALIFORNIA CON SOURCE AND	
Client Instructions:	Phone number	is missing c	on COC- TMC	5/27/23					
16. Additional remarks:									
17. Cooler Information									
Cooler No Temp °C	Condition	Seal Intact	Seal No	Seal Da	ite	Signed I	Ву		
1 1.9	Good Y	es	Yogi		1			1	

PM	1
12:33:21	
7/3/2024	
, OCD:	7
Received by	

hain-of-Custody Record	i urn-Around Time:	HAII ENVIDONMENTAI
Client: Exselven	X Standard □ Rush	1
	Project Name:	www.hallenvironmental.com
Mailing Address: 14.56 Section & Section	Alateral K-51	4901 Hawkins NE - Albuquerque, NM 87109
7	Proje	Tel. 505-345-3975 Fax 505-345-4107
Phone #:	05N1226010	Analysis Request
email or Fax#: K Swwmerpenscola week	Lancer Project Manager:	<sup>†</sup> OS
ige:		oO⁴' a
Standard	Sample: ( )	ORO 1) 2072 3, F
NELAC Other	On Ice: A Yes D No UCD!	S/8004.
уре)	olers:	O(GR) bod (3 016 016 016 010 010 010 010 010 010 010
	Cooler Temp(Including CF): 2, 1-0.1 - 1.9 (°C)	estic Meth by 83 8 Md Br, 1 Br, 1
Date Time Matrix Sample Name	Container Preservative HEAL No.	TEX / YaTEX /
S 021	Dalle.	3 3 3 4 4 4 3 1
3.00	7 6002	*
13.25 W	\$ 003	
+ Trip Stank	A TOTAL TOTAL	
67/47/S TWL-	Times of the part of the contract of the contr	
		A CONTROL OF THE PROPERTY OF T
Date: Time: Relinquished by:	Received by: Via: Legite Time	Remarks:
22 2	82/27 /200 March 120	
Solve Transfer of the state of	via. (wond Date	Bill to Ensolue
, camples	contracted to other accredited laboratories. This serves as notice of this	edited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 8/6/2024 3:47:11 PM



Eurofins Environment Testing South Central, LLC 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

December 05, 2023

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603

FAX:

RE: Lateral K 51 2010 OrderNo.: 2311B25

#### Dear Kyle Summers:

Eurofins Environment Testing South Central, LLC received 8 sample(s) on 11/21/2023 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 do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **2311B25** 

#### Date Reported: 12/5/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-4

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 10:10:00 AM

 Lab ID:
 2311B25-001
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL Qւ	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	11/28/2023 7:08:54 PM	BW1014
Toluene	ND	1.0	μg/L	1	11/28/2023 7:08:54 PM	BW1014
Ethylbenzene	ND	1.0	μg/L	1	11/28/2023 7:08:54 PM	BW1014
Xylenes, Total	ND	2.0	μg/L	1	11/28/2023 7:08:54 PM	BW1014
Surr: 4-Bromofluorobenzene	92.9	52.4-148	%Rec	1	11/28/2023 7:08:54 PM	BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Lab Order 2311B25

Date Reported: 12/5/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-2

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 11:00:00 AM

 Lab ID:
 2311B25-002
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	11/28/2023 7:55:24 PM	BW1014
Toluene	ND	1.0	μg/L	1	11/28/2023 7:55:24 PM	BW1014
Ethylbenzene	ND	1.0	μg/L	1	11/28/2023 7:55:24 PM	BW1014
Xylenes, Total	ND	2.0	μg/L	1	11/28/2023 7:55:24 PM	BW1014
Surr: 4-Bromofluorobenzene	92.7	52.4-148	%Rec	1	11/28/2023 7:55:24 PM	BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Lab Order 2311B25

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/5/2023

CLIENT: ENSOLUM Client Sample ID: MW-1

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 10:35:00 AM

 Lab ID:
 2311B25-003
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	1.0	μg/L	1	11/28/2023 8:18:40 PM	BW1014
Toluene	ND	1.0	μg/L	1	11/28/2023 8:18:40 PM	BW1014
Ethylbenzene	ND	1.0	μg/L	1	11/28/2023 8:18:40 PM	BW1014
Xylenes, Total	ND	2.0	μg/L	1	11/28/2023 8:18:40 PM	BW1014
Surr: 4-Bromofluorobenzene	93.3	52.4-148	%Rec	1	11/28/2023 8:18:40 PM	BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Lab Order **2311B25**Date Reported: **12/5/2023** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-17

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 11:25:00 AM

 Lab ID:
 2311B25-004
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	:: JJP
Benzene	ND	1.0	μg/L	1	11/28/2023 8:41:48 PM	BW1014
Toluene	ND	1.0	μg/L	1	11/28/2023 8:41:48 PM	BW1014
Ethylbenzene	ND	1.0	μg/L	1	11/28/2023 8:41:48 PM	BW1014
Xylenes, Total	ND	2.0	μg/L	1	11/28/2023 8:41:48 PM	BW1014
Surr: 4-Bromofluorobenzene	93.2	52.4-148	%Rec	1	11/28/2023 8:41:48 PM	BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Lab Order 2311B25

Date Reported: 12/5/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-16

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 11:50:00 AM

 Lab ID:
 2311B25-005
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	11/28/2023 9:04:59 PM	BW1014
Toluene	ND	1.0	μg/L	1	11/28/2023 9:04:59 PM	BW1014
Ethylbenzene	ND	1.0	μg/L	1	11/28/2023 9:04:59 PM	BW1014
Xylenes, Total	ND	2.0	μg/L	1	11/28/2023 9:04:59 PM	BW1014
Surr: 4-Bromofluorobenzene	94.0	52.4-148	%Rec	1	11/28/2023 9:04:59 PM	BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Lab Order **2311B25** 

Date Reported: 12/5/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-14

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 12:20:00 PM

 Lab ID:
 2311B25-006
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: <b>JJP</b>
Benzene	ND	1.0	μg/L	1	11/28/2023 9:28:09 PM	BW1014
Toluene	ND	1.0	μg/L	1	11/28/2023 9:28:09 PM	BW1014
Ethylbenzene	ND	1.0	μg/L	1	11/28/2023 9:28:09 PM	BW1014
Xylenes, Total	ND	2.0	μg/L	1	11/28/2023 9:28:09 PM	BW1014
Surr: 4-Bromofluorobenzene	94.6	52.4-148	%Rec	1	11/28/2023 9:28:09 PM	BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Lab Order 2311B25

Date Reported: 12/5/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-20

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 12:50:00 PM

 Lab ID:
 2311B25-007
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	1.0	μg/L	1	11/28/2023 9:51:18 PM	BW1014
Toluene	ND	1.0	μg/L	1	11/28/2023 9:51:18 PM	BW1014
Ethylbenzene	ND	1.0	μg/L	1	11/28/2023 9:51:18 PM	BW1014
Xylenes, Total	ND	2.0	μg/L	1	11/28/2023 9:51:18 PM	BW1014
Surr: 4-Bromofluorobenzene	94.8	52.4-148	%Rec	1	11/28/2023 9:51:18 PM	BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Lab Order **2311B25**Date Reported: **12/5/2023** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Client Sample ID: MW-19

 Project:
 Lateral K 51 2010
 Collection Date: 11/20/2023 1:05:00 PM

 Lab ID:
 2311B25-008
 Matrix: AQUEOUS
 Received Date: 11/21/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analy	st: <b>JJP</b>
Benzene	200	2.0	D	μg/L	2	11/28/2023 10:14:26 F	PM BW1014
Toluene	ND	2.0	D	μg/L	2	11/28/2023 10:14:26 F	PM BW1014
Ethylbenzene	41	2.0	D	μg/L	2	11/28/2023 10:14:26 F	PM BW1014
Xylenes, Total	ND	4.0	D	μg/L	2	11/28/2023 10:14:26 F	PM BW1014
Surr: 4-Bromofluorobenzene	123	52.4-148	D	%Rec	2	11/28/2023 10:14:26 F	PM BW1014

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

- \* 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
   J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

## **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2311B25** 

05-Dec-23

Client: ENSOLUM
Project: Lateral K 51 2010

Sample ID: 2311b25-001ams	Samp1	уре: МЅ	;	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID: MW-4	Batcl	n ID: BW	/101445	F	RunNo: 10	01445				
Prep Date:	Analysis [	Date: 11	/28/2023	(	SeqNo: 3	733206	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.3780	99.0	70	130			
Toluene	20	1.0	20.00	0.5440	97.8	70	130			
Ethylbenzene	20	1.0	20.00	0.2500	98.1	70	130			
Xylenes, Total	61	2.0	60.00	2.138	97.5	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		97.6	52.4	148			

Sample ID: 2311b25-001amsd	Samp1	уре: МЅ	SD .	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID: MW-4	Batch	n ID: <b>BW</b>	/101445	F	RunNo: 10	01445				
Prep Date:	Analysis D	Date: 11	/28/2023	5	SeqNo: 3	733207	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0.3780	94.8	70	130	4.23	20	
Toluene	19	1.0	20.00	0.5440	94.1	70	130	3.67	20	
Ethylbenzene	20	1.0	20.00	0.2500	97.1	70	130	1.04	20	
Xylenes, Total	60	2.0	60.00	2.138	96.2	70	130	1.28	20	
Surr: 4-Bromofluorobenzene	19		20.00		94.4	52.4	148	0	0	

Sample ID: 100ng btex Ics	SampT	ype: <b>LC</b>	S	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSW	Batcl	n ID: <b>BW</b>	/101445	F	RunNo: 10	01445				
Prep Date:	Analysis D	Date: 11	/28/2023	(	SeqNo: 37	733217	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.4	70	130			
Toluene	20	1.0	20.00	0	99.4	70	130			
Ethylbenzene	20	1.0	20.00	0	99.3	70	130			
Xylenes, Total	60	2.0	60.00	0	99.3	70	130			
Surr: 4-Bromofluorobenzene	19		20.00		94.2	52.4	148			

Sample ID: mb	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBW	Batch	n ID: BW	/101445	F	RunNo: 10	01445				
Prep Date:	Analysis D	Date: 11	/28/2023	5	SeqNo: 37	733218	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	19		20.00		92.7	52.4	148			

- 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 Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

**Environment Testin** 

Eurofins Environment Testing South Central, LLC 4901 Hawkins NE

Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Released to Imaging: 8/6/2024 3:47:11 PM

Client Name: ENSOLUM	Work Order Number:	2311B25		RcptNo: 1
Received By: Juan Rojas	11/21/2023 7:10:00 AM	1	Gunza B	
Completed By: Cheyenne Cason	11/21/2023 2:19:05 PM	1	Chul	
Reviewed By: # //- 21-23				
Chain of Custody				
1. Is Chain of Custody complete?		Yes 🔽	No 🗌	Not Present
2. How was the sample delivered?		Courier		
<u>Log In</u>			[7]	NA [7]
<ol><li>Was an attempt made to cool the samples'</li></ol>	?	Yes 🗹	No 🗌	NA 🗌
4. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗌
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗌	
6. Sufficient sample volume for indicated test(	s)?	Yes 🗹	No 🗌	
7. Are samples (except VOA and ONG) prope	rly preserved?	Yes 🗹	No 🗌	
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗌
9. Received at least 1 vial with headspace <1	'4" for AQ VOA?	Yes 🗹	No 🗌	NA 🗌
10. Were any sample containers received brok	en?	Yes 🗌	No 🗸	# of preserved
44.0		Yes 🗸	WWW D	bottles checked for pH:
11. Does paperwork match bottle labels?  (Note discrepancies on chain of custody)		Tes 🖭		(<2 or >12 unless noted
12. Are matrices correctly identified on Chain of	f Custody?	Yes 🗹	No 🗆	Adjusted?
13. Is it clear what analyses were requested?		Yes 🗹	No 📙	and CM 11/2/2
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 📙 🏻	Checked to the checke
Special Handling (if applicable)				
15. Was client notified of all discrepancies with	h this order?	Yes 🗌	No 🗌	NA 🗹
Person Notified:	Date:	11/21/2	30	
Person Notified: Christne  By Whom: Charte	Via:	eMail 🔽	Phone  Fax	☐ In Person
Cychn	Serva Orangu - a	002 + 00		
Client Instructions: Lobels	screpuncy on i	WC * 00.		A STALL STANDARD AND THE STANDARD AND TH
16. Additional remarks:				
17. Cooler Information				
	Seal Intact   Seal No	Seal Date	Signed By	
1 1.1 Good N	lot Present Yogi			

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Chain-of-Custody Record	Turn-Around Time:	HALL ENVIRONMENTAL
Client: The Solution CCC	C Standard □ Rush	ANALYSIS LABORATORY
	Project Name:	www.hallenvironmental.com
Mailing Address: Lots < Rib (2002)	[atera] K-51/2010]	4901 Hawkins NE - Albuquerque, NM 87109
01479		Tel. 505-345-3975 Fax 505-345-4107
	05x1226010	Analysis Request
email or Fax#: Les convenents @ earsed were , con	Pro	OS (OS
age:	Ĺ	oO <sup>⊄</sup> '
	N. January C. D.	982 년 (1) 2703 구 (2
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ype)	# of Coolers: 1	o(GR)
	Cooler Temp(including CF): 6 9+6.2511 (°C)	orsti VOrsti Br, VOrsti
	Container Preservative HEAL No.	TEX, 1981-80 (1981-1981) (1981
Date Time Matrix Sample Name	Lype and # Type	8 8 8
11/20 10:10 01:01 NW-4	3x 42/400 Hall, 601	<u> </u>
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3	063	X
3	1004	×
- 1	905	×
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180 (MINT-MORK	the support and the city of a consolinal laboratorias. This serves as notice of this	This sawas as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

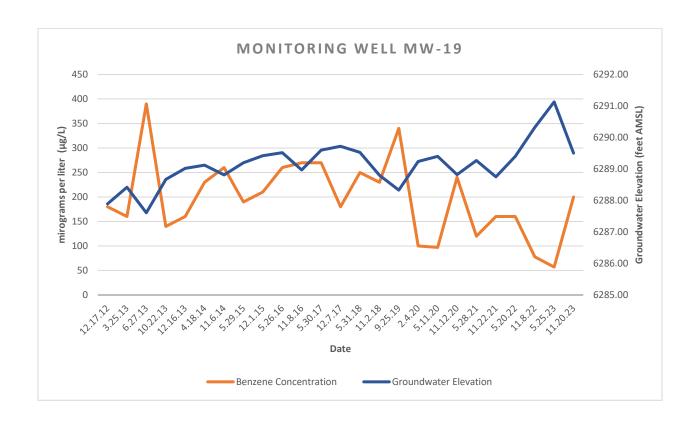
Released to Imagenes: 8/6/2024 3:47:11 PM



# **APPENDIX E**

# **Benzene Concentration Chart**

2023 Groundwater Monitoring Report Enterprise Field Services, LLC Lateral K-51 Pipeline Release (2010)





District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 360987

#### **CONDITIONS**

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	360987
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

#### CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 annual groundwater monitoring report: content satisfactory 1. Continue to conduct semi-annual groundwater monitoring at the site, limiting the sampling frequency for wells MW-3, MW-11, MW-12, and MW-13 to an annual basis until COCs are demonstrating to be below the WQCC human health standards in Title 20 of the NMAC, then transition back to a quarterly schedule. 2. Proceed with plans to install a shallow recovery well upgradient of monitoring well MW-19 and either repair or replace MW-18. 3. If aquifer testing is conducted, please notify OCD 4 business days in advance, before activity takes place. 4. Submit the 2024 annual report to OCD by April 1, 2025. 5. 2021 and 2022 Annual Reports have been accepted for the record.	8/6/2024