



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.wapps.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 Submittal2), 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 (sdrewry@eprod.com) or phone (713-381-5696), or our project consultant Kyle Summers (ksummers@ensolum.com) 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 < ksummers@ensolum.com >

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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:

A blue ink signature of Landon Daniell, consisting of a stylized 'L' and 'D' followed by a horizontal line.

Landon Daniell
Staff Geologist

A blue ink signature of Kyle Summers, featuring a stylized 'K' and 'S' followed by a horizontal line.

Kyle Summers
Senior Project Manager

2021 Groundwater Monitoring Report
Enterprise Field Services, LLC
Lateral K-51 Pipeline Release (2010)
March 29, 2022



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.

2021 Groundwater Monitoring Report
Enterprise Field Services, LLC
Lateral K-51 Pipeline Release (2010)
March 29, 2022



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2021 Groundwater Monitoring Report
Enterprise Field Services, LLC
Lateral K-51 Pipeline Release (2010)
March 29, 2022



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.¹

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.

¹ 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 (HgCl₂)), 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.

2.2 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	Sample Matrix	No. of Samples (May/Nov)	EPA Method
BTEX	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)**.

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.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 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.¹
- 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.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

¹ 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.¹
- 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

¹ 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.

2021 Groundwater Monitoring Report
Enterprise Field Services, LLC
Lateral K-51 Pipeline Release (2010)
March 29, 2022



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.

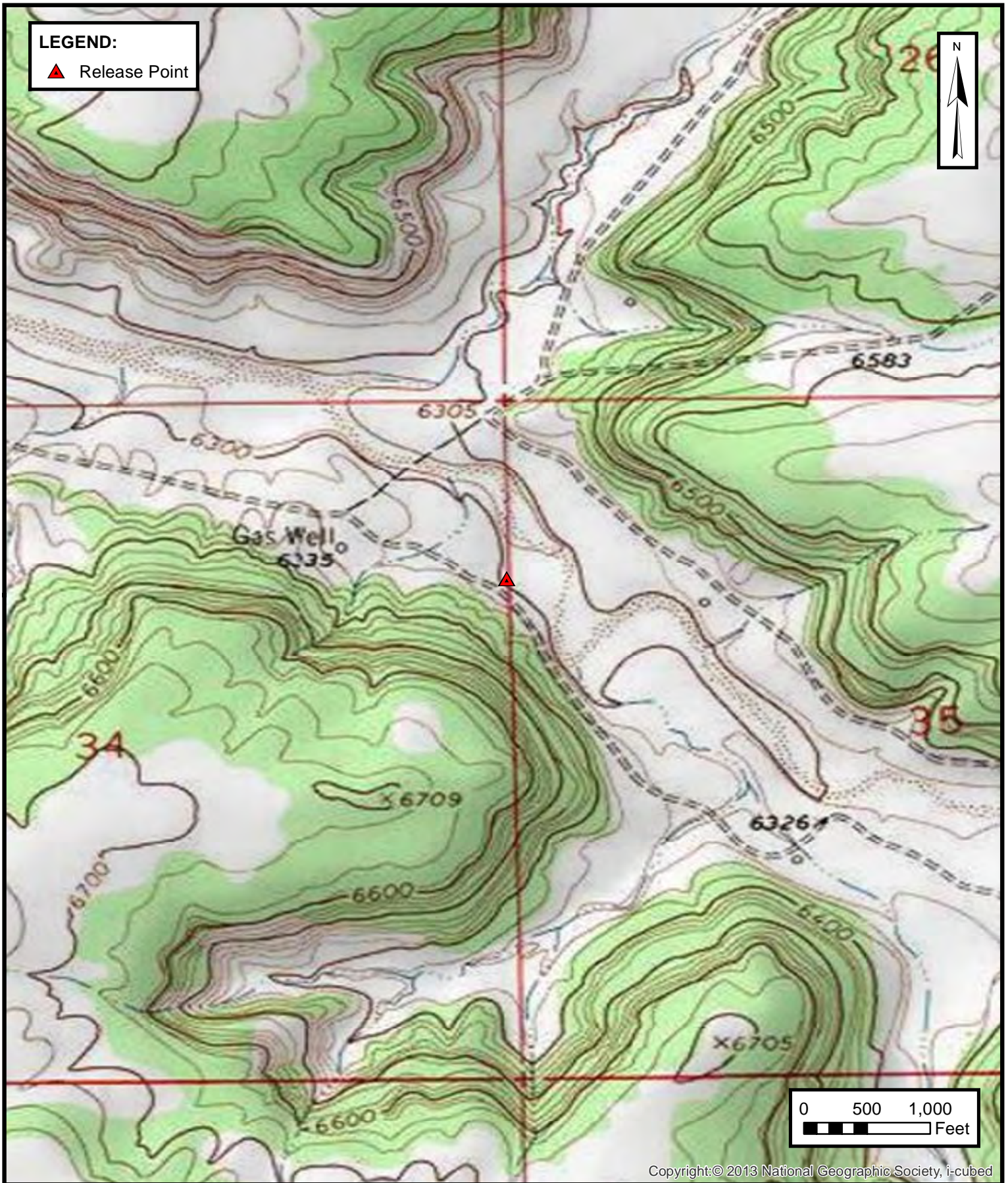
5.3 Reliance

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

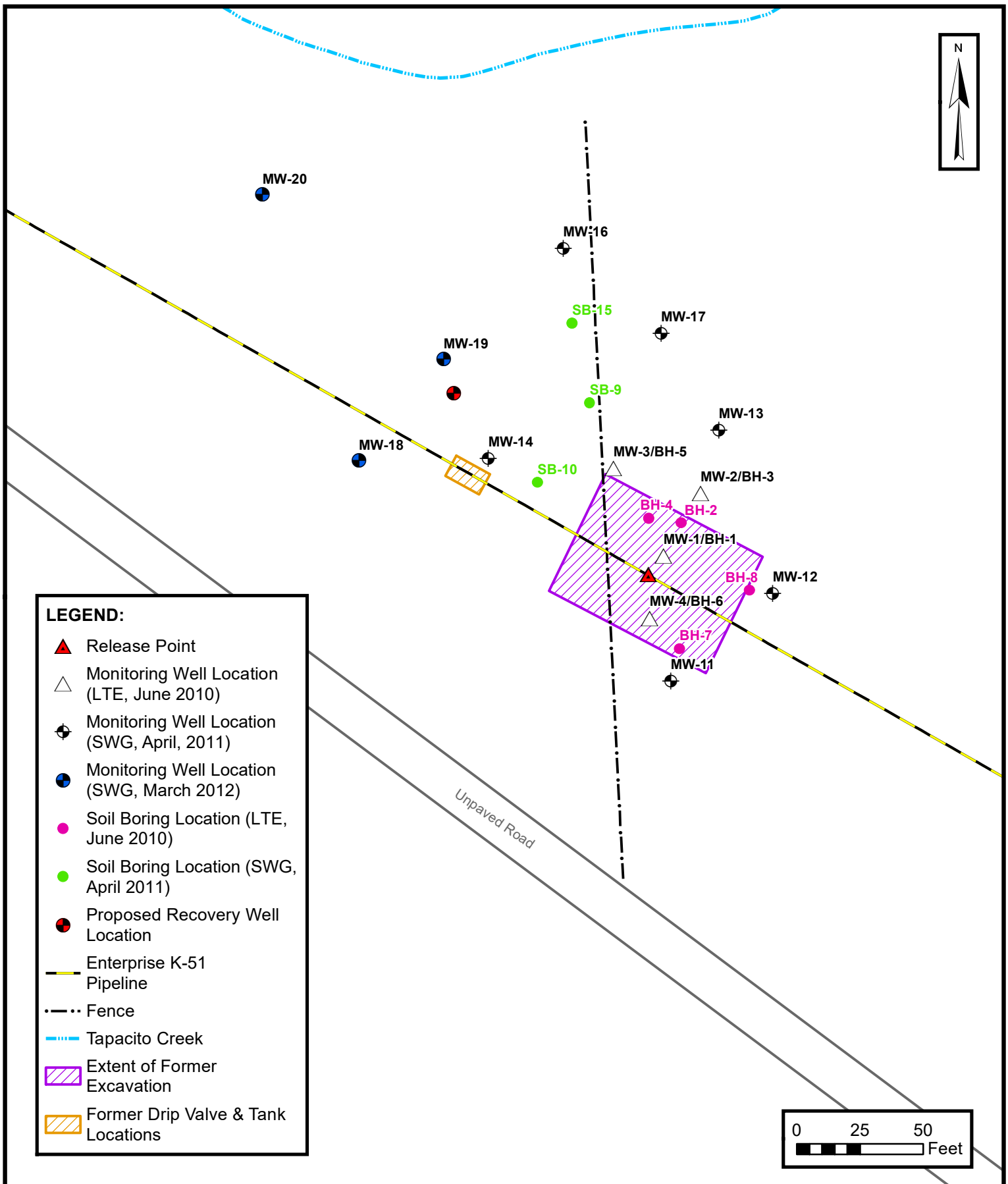


ENSOLUM
Environmental & Hydrogeologic Consultants

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

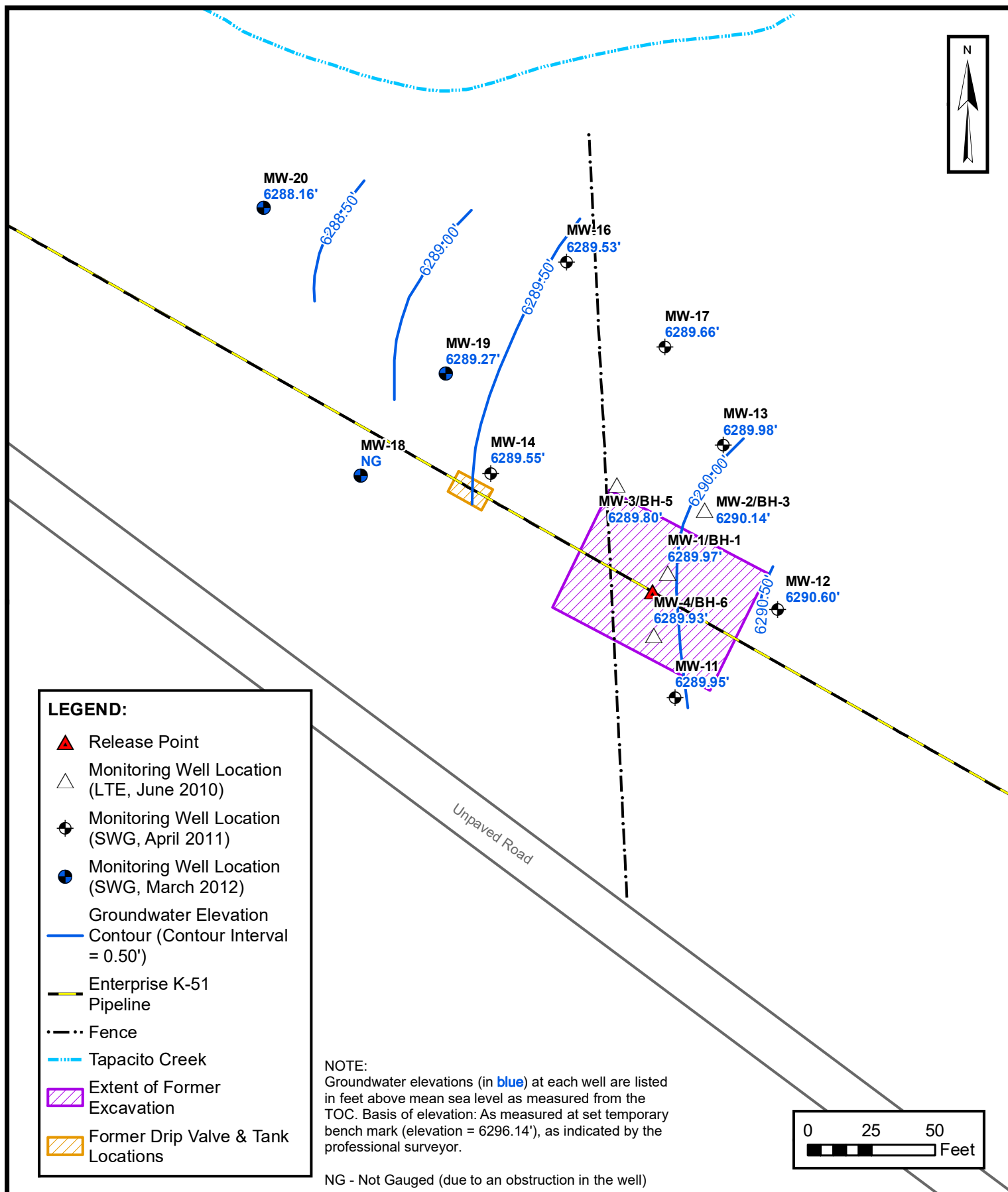
FIGURE
1

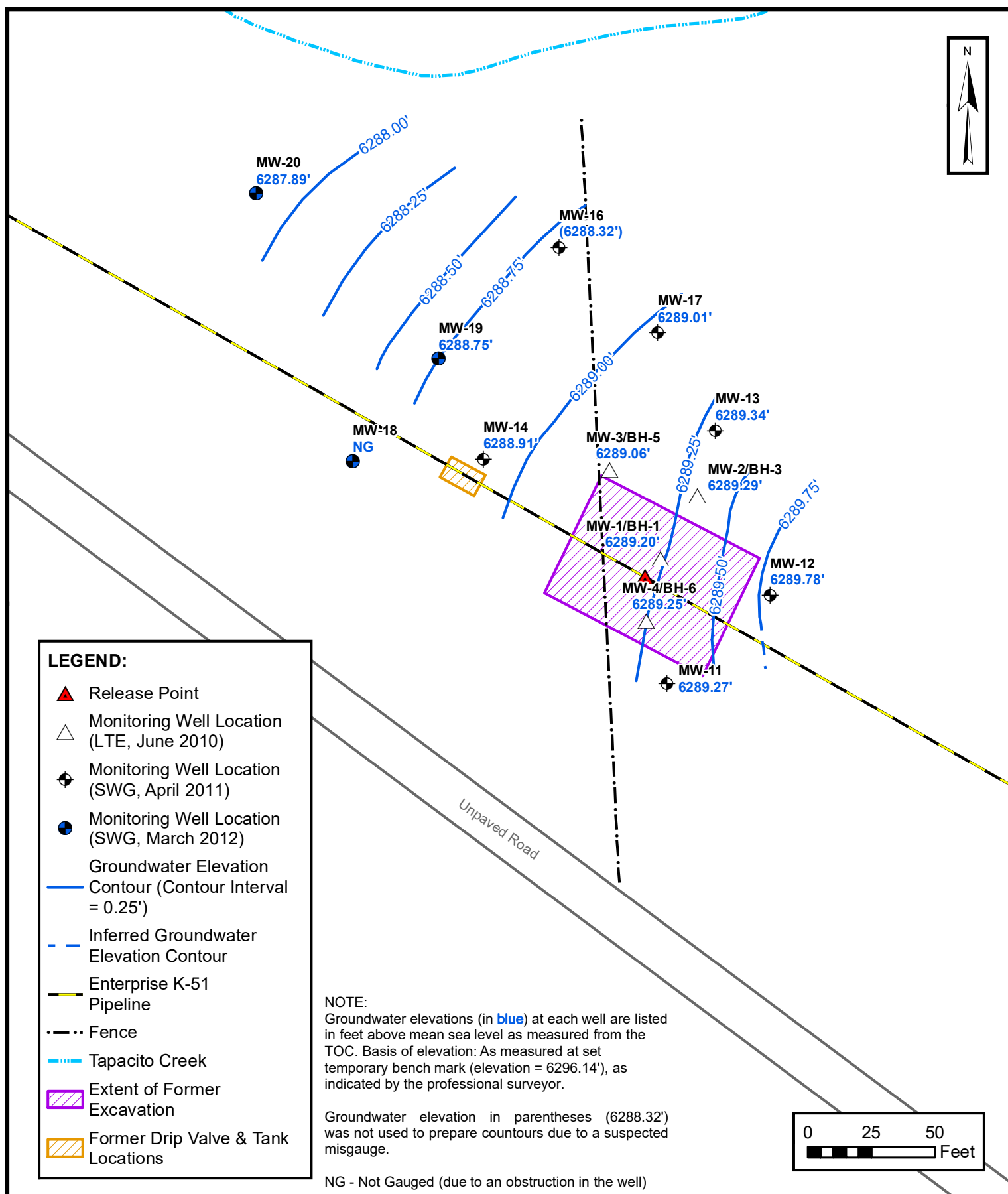


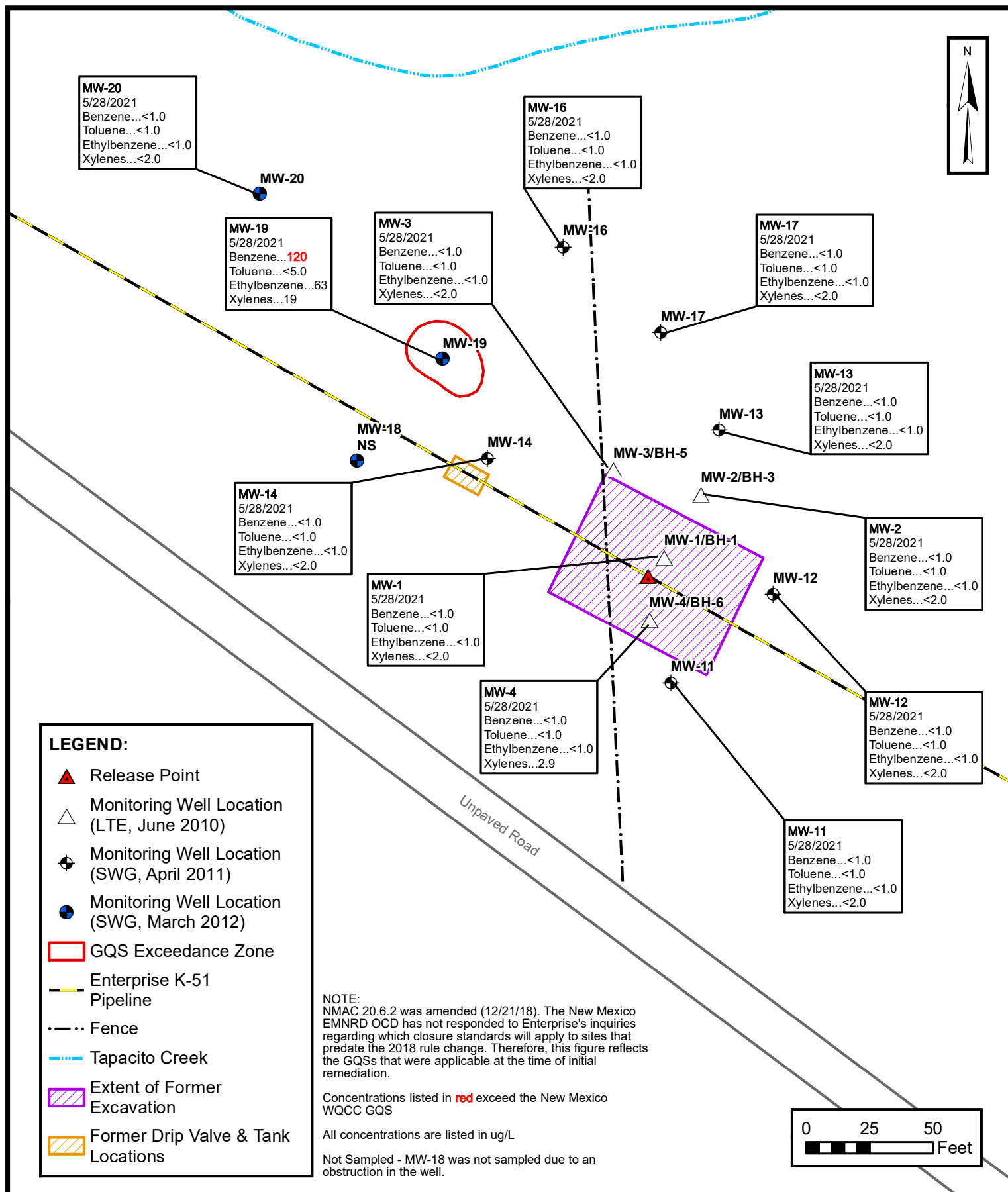


SITE MAP

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



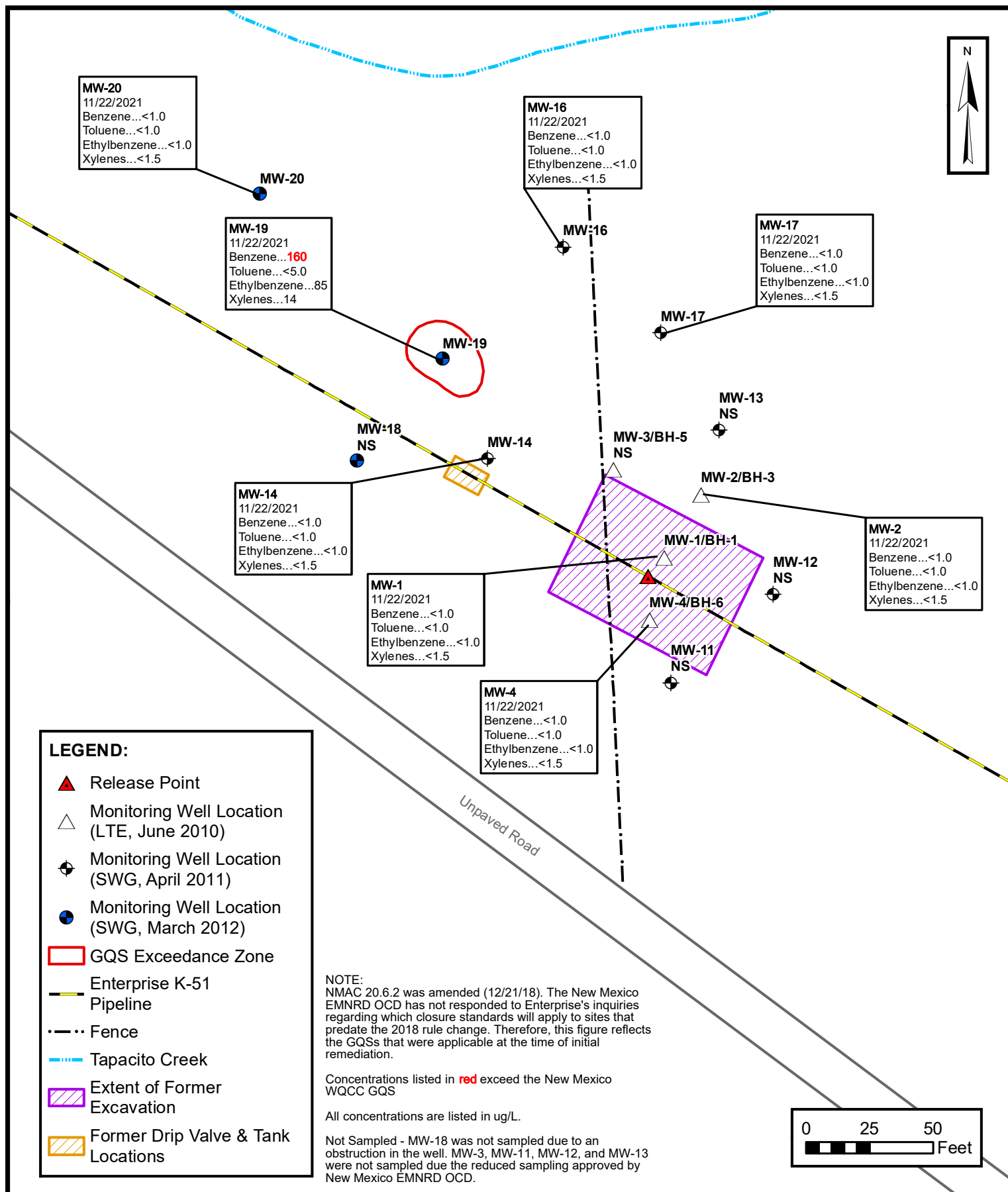




GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP (MAY 2021)

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



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



Environmental & Hydrogeologic Consultants



APPENDIX B

Tables



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
SMA Sample - Open Excavation							
Excavation	4.21.10	7,000	13,000	540	5,200	NA	NA
Monitoring Wells Installed by LTE							
MW-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
	11.6.14	32	<1.0	27	61	NA	NA
	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
	11.08.16	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
	11.02.18	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
MW-2	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
	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
	11.08.16	<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
	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



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-3	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
	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 ^b	NS	NS	NS	NS	NS	NS
MW-4	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
	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
	11.08.16	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
	11.01.18	<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	2.9	NA	NA
	11.22.21	<1.0	<1.0	<1.0	<1.5	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
Monitoring Wells Installed by Apex TITAN (formerly Southwest Geoscience)							
MW-11	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
	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 ^B	NS	NS	NS	NS	NS	NS
MW-12	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
	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 ^D	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-13	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
	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 ^o	NS	NS	NS	NS	NS	NS
MW-14	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
	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
	11.07.16	<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
	11.01.18	<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



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-16	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
	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
	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
	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
MW-17	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
	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
	11.07.16	<1.0	<1.0	<1.0	<2.0	NA	NA
	5.26.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	12.07.17	<1.0	<1.0	<1.0	<1.5	NA	NA
	5.31.18	<1.0	<1.0	<1.0	<1.5	NA	NA
	11.01.18	<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	<1.0	<1.0	<1.0	<1.5	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-18	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	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
	11.07.16	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
	11.01.18	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
MW-19	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
	11.08.16	270	<1.0	80	190	NA	NA
	5.30.17	270	<1.0	88	640	NA	NA
	12.07.17	180	<1.0	70	150	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



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-20	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
	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

^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-3, MW-11, MW-12, and MW-13 to annual events.

* = Monitoring well purged/sampled utilizing disposable bailer during this event

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



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-1	4.21.11	ND	11.80	ND	17.71	7.71-17.71	6300.89	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
	11.30.15	ND	10.90	ND				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				6289.20
MW-2	4.21.11	ND	10.55	ND	18.45	8.45-18.45	6299.82	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
	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				6289.47
	5.28.21	ND	9.68	ND				6290.14
	11.22.21	ND	10.53	ND				6289.29



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-3	4.21.11	ND	11.30	ND	18.39	8.39-18.39	6300.22	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				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
	11.30.15	ND	10.40	ND				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
MW-4	4.21.11	ND	11.90	ND	19.47	9.47-19.47	6300.91	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				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	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



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-11	4.21.11	ND	11.98	ND	19.07	9.07-19.07	6301.19	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
	11.30.15	ND	11.18	ND				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
MW-12	4.21.11	ND	8.96	ND	18.03	8.03-18.03	6299.08	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
	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	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



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-13	4.21.11	ND	9.07	ND	17.90	7.90-17.90	6298.27	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				6289.16
	6.27.13	ND	9.94	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
	11.6.14	ND	8.83	ND				6289.44
	5.28.15	ND	8.32	ND				6289.95
	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				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
MW-14	4.21.11	ND	12.54	ND	18.88	8.88-18.88	6301.20	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	ND	12.23	ND				6288.97
	5.28.15	ND	11.67	ND				6289.53
	11.30.15	ND	11.62	ND				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



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-16	4.21.11	ND	12.06	ND	18.01	8.01-18.01	6299.89	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
	5.28.15	ND	10.56	ND				6289.33
	11.30.15	ND	10.39	ND				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 ^A	ND	11.57	ND				6288.32
MW-17	4.21.11	ND	9.90	ND	18.16	8.16-18.16	6298.57	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
	11.30.15	ND	8.87	ND				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



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-18	3.20.12	ND	16.60	ND	NA	NA	6304.77	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
	5.25.16	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	Blockage						Blockage
MW-19	3.20.12	ND	15.69	ND	23.22	13.22-23.22	6303.80	6288.11
	6.19.12 ^B	16.25	16.32	0.07				6287.52
	9.19.12 ^B	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
	5.25.16	ND	14.28	ND				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				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



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-20	3.20.12	ND	25.82	ND	30.51	20.51-30.51	6312.59	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
	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

* - corrected for presence of phase-separated 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.

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

^A - Suspected misgauge.

^B - No visual verification. May not be hydrocarbon.

NA - Not Available

ND - Not Detected



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: CCM	
Benzene	ND	1.0		µg/L	1	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	1	6/2/2021 8:01:00 PM	R78810
Xylenes, Total	ND	2.0		µg/L	1	6/2/2021 8:01:00 PM	R78810
Surr: 4-Bromofluorobenzene	85.6	70-130		%Rec	1	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2106007
Date Reported: 6/7/2021

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	1.0		µg/L	1	6/3/2021 12:20:00 AM	B78810
Toluene	ND	1.0		µg/L	1	6/3/2021 12:20:00 AM	B78810
Ethylbenzene	ND	1.0		µg/L	1	6/3/2021 12:20:00 AM	B78810
Xylenes, Total	ND	2.0		µg/L	1	6/3/2021 12:20:00 AM	B78810
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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CLIENT: ENSOLUM

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.	B	Analyte detected in the associated Method Blank	Page 12 of 14
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Limit	
	S	% Recovery outside of range due to dilution or matrix			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2106007

07-Jun-21

Client: ENSOLUM
Project: Lateral K-51 2010

Sample ID: 100ng BTEX lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch ID: R78810		RunNo: 78810							
Prep Date:	Analysis Date: 6/2/2021		SeqNo: 2763901		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		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID: PBW		Batch ID: R78810		RunNo: 78810						
Prep Date:		Analysis Date: 6/2/2021		SeqNo: 2763902		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 lcs2		SampType: LCS		TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW		Batch ID: B78810		RunNo: 78810						
Prep Date:		Analysis Date: 6/2/2021		SeqNo: 2764368		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: EPA Method 8021B: Volatiles						
Client ID: PBW		Batch ID: B78810		RunNo: 78810						
Prep Date:		Analysis Date: 6/2/2021		SeqNo: 2764369		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 Quantitative 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 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		SampType: MS			TestCode: EPA Method 8021B: Volatiles					
Client ID: MW-3		Batch ID: B78810			RunNo: 78810					
Prep Date:		Analysis Date: 6/2/2021			SeqNo: 2764371		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: 2106007-008amsd		SampType: MSD			TestCode: EPA Method 8021B: Volatiles					
Client ID: MW-3		Batch ID: B78810			RunNo: 78810					
Prep Date:		Analysis Date: 6/2/2021			SeqNo: 2764372		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 Quantitative Limit

S % Recovery outside of range due to dilution or matrix

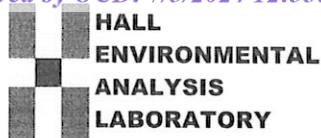
B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit



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

Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2106007

RcptNo: 1

Received By: Sean Livingston

5/29/2021 8:35:00 AM

Completed By: Cheyenne Cason

6/1/2021 8:12:56 AM

Reviewed By: DAD 6.1.21

Sean Livingston
Cason

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: SPA 6.1.21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			



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 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2111B24

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum
Project: Lateral K 51 2010
Lab ID: 2111B24-001

Client Sample ID: MW-4
Collection Date: 11/22/2021 10:15:00 AM
Received Date: 11/23/2021 7:45:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: JR
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	R83191

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order 2111B24

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: JR
Benzene	ND	1.0		µg/L	1	11/30/2021 2:50:39 PM	R83191
Toluene	ND	1.0		µg/L	1	11/30/2021 2:50:39 PM	R83191
Ethylbenzene	ND	1.0		µg/L	1	11/30/2021 2:50:39 PM	R83191
Xylenes, Total	ND	1.5		µg/L	1	11/30/2021 2:50:39 PM	R83191
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	11/30/2021 2:50:39 PM	R83191
Surr: Dibromofluoromethane	95.5	70-130		%Rec	1	11/30/2021 2:50:39 PM	R83191
Surr: Toluene-d8	99.1	70-130		%Rec	1	11/30/2021 2:50:39 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order 2111B24

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: JR
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 PM	R83191
Ethylbenzene	ND	1.0		µg/L	1	11/30/2021 3:19:14 PM	R83191
Xylenes, Total	ND	1.5		µg/L	1	11/30/2021 3:19:14 PM	R83191
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	11/30/2021 3:19:14 PM	R83191
Surr: Dibromofluoromethane	99.7	70-130		%Rec	1	11/30/2021 3:19:14 PM	R83191
Surr: Toluene-d8	99.1	70-130		%Rec	1	11/30/2021 3:19:14 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order 2111B24

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							Analyst: JR
Benzene	ND	1.0		µg/L	1	11/30/2021 3:47:51 PM	R83191
Toluene	ND	1.0		µg/L	1	11/30/2021 3:47:51 PM	R83191
Ethylbenzene	ND	1.0		µg/L	1	11/30/2021 3:47:51 PM	R83191
Xylenes, Total	ND	1.5		µg/L	1	11/30/2021 3:47:51 PM	R83191
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	11/30/2021 3:47:51 PM	R83191
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	11/30/2021 3:47:51 PM	R83191
Surr: Toluene-d8	100	70-130		%Rec	1	11/30/2021 3:47:51 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order 2111B24

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2111B24
Date Reported: 12/7/2021

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: JR
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 PM	R83191
Ethylbenzene	ND	1.0		µg/L	1	11/30/2021 4:45:18 PM	R83191
Xylenes, Total	ND	1.5		µg/L	1	11/30/2021 4:45:18 PM	R83191
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	11/30/2021 4:45:18 PM	R83191
Surr: Dibromofluoromethane	98.7	70-130		%Rec	1	11/30/2021 4:45:18 PM	R83191
Surr: Toluene-d8	97.6	70-130		%Rec	1	11/30/2021 4:45:18 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order 2111B24

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							Analyst: JR
Benzene	ND	1.0		µg/L	1	11/30/2021 5:13:48 PM	R83191
Toluene	ND	1.0		µg/L	1	11/30/2021 5:13:48 PM	R83191
Ethylbenzene	ND	1.0		µg/L	1	11/30/2021 5:13:48 PM	R83191
Xylenes, Total	ND	1.5		µg/L	1	11/30/2021 5:13:48 PM	R83191
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	11/30/2021 5:13:48 PM	R83191
Surr: Dibromofluoromethane	96.5	70-130		%Rec	1	11/30/2021 5:13:48 PM	R83191
Surr: Toluene-d8	95.9	70-130		%Rec	1	11/30/2021 5:13:48 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order 2111B24

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: JR
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	R83191
Surr: Dibromofluoromethane	89.1	70-130		%Rec	5	11/30/2021 5:42:30 PM	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2111B24
03-Jan-22

Client: Ensolum
Project: Lateral K 51 2010

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260: Volatiles Short List						
Client ID:	LCSW	Batch ID:	R83191	RunNo:	83191						
Prep Date:		Analysis Date:	11/30/2021	SeqNo:	2955404	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	SampType:	MBLK	TestCode:	EPA Method 8260: Volatiles Short List						
Client ID:	PBW	Batch ID:	R83191	RunNo:	83191						
Prep Date:		Analysis Date:	11/30/2021	SeqNo:	2955405	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 Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix interference
- B

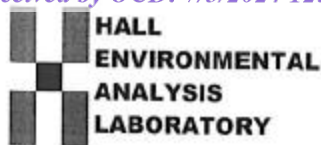
Analyte detected in the associated Method Blank
- E

Estimated value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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

Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2111B24

RcptNo: 1

Received By: Isaiah Ortiz 11/23/2021 7:45:00 AM

Completed By: Desiree Dominguez 11/23/2021 8:37:03 AM

Reviewed By: *JN 11/23/21*

I-Ox
ID3

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *Cue 11/23/21*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good	Yes			
2	1.1	Good	Yes			

Chain-of-Custody Record

Client:

Environmental LLC

Mailing Address:

4858 Rte 100, Suite A

Phone #:

505-345-3975

Email or Fax#:

jenn@environmental.com

QA/QC Package:

☐ Standard
 ☐ Level 4 (Full Validation)

Accreditation:

☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard

☐ Rush

Project Name:

Lateral K-51 (2010)

Project #:

05A1226010

Project Manager:

K. Summers

Sampler:

L. Daniell

On Ice:

☐ Yes

☐ No

of Coolers:

Cooler Temp (including CFI):

(°C)

Date

Time

Matrix

Sample Name

Container Type and #

Preservative Type

HEAL No.

(°C)

BTX / MIB / TMB (6021)

TPH:8015D (GRO / DRO / MRO)

8061 Pesticides/8062 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Date:

Time:

Relinquished by:

Sample Name

Container Type and #

Preservative Type

HEAL No.

(°C)

BTX / MIB / TMB (6021)

TPH:8015D (GRO / DRO / MRO)

8061 Pesticides/8062 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks:

Date

Time

Relinquished by:

Sample Name

Container Type and #

Preservative Type

HEAL No.

(°C)

BTX / MIB / TMB (6021)

TPH:8015D (GRO / DRO / MRO)

8061 Pesticides/8062 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks:

Bill to Endran

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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.wapps.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 Submittal2), 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 (sdrewry@eprod.com) or phone (713-381-5696), or our project consultant Kyle Summers (ksummers@ensolum.com) 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 < ksummers@ensolum.com >

P.O. Box 4324
Houston, Texas 77210-4324
713.381.6500

1100 Louisiana Street
Houston, Texas 77002-5227
www.epplp.com



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:

Enterprise Field Services, LLC
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

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.

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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 (GQs) 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 GQs (*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.¹

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

¹ 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_2)), 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.¹ 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.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 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.¹
- 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.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 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.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 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.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 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.¹
- 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.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 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.

¹ 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.

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 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.¹ The groundwater samples collected from the other sampled monitoring wells in 2022 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**.

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

¹ 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.

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.

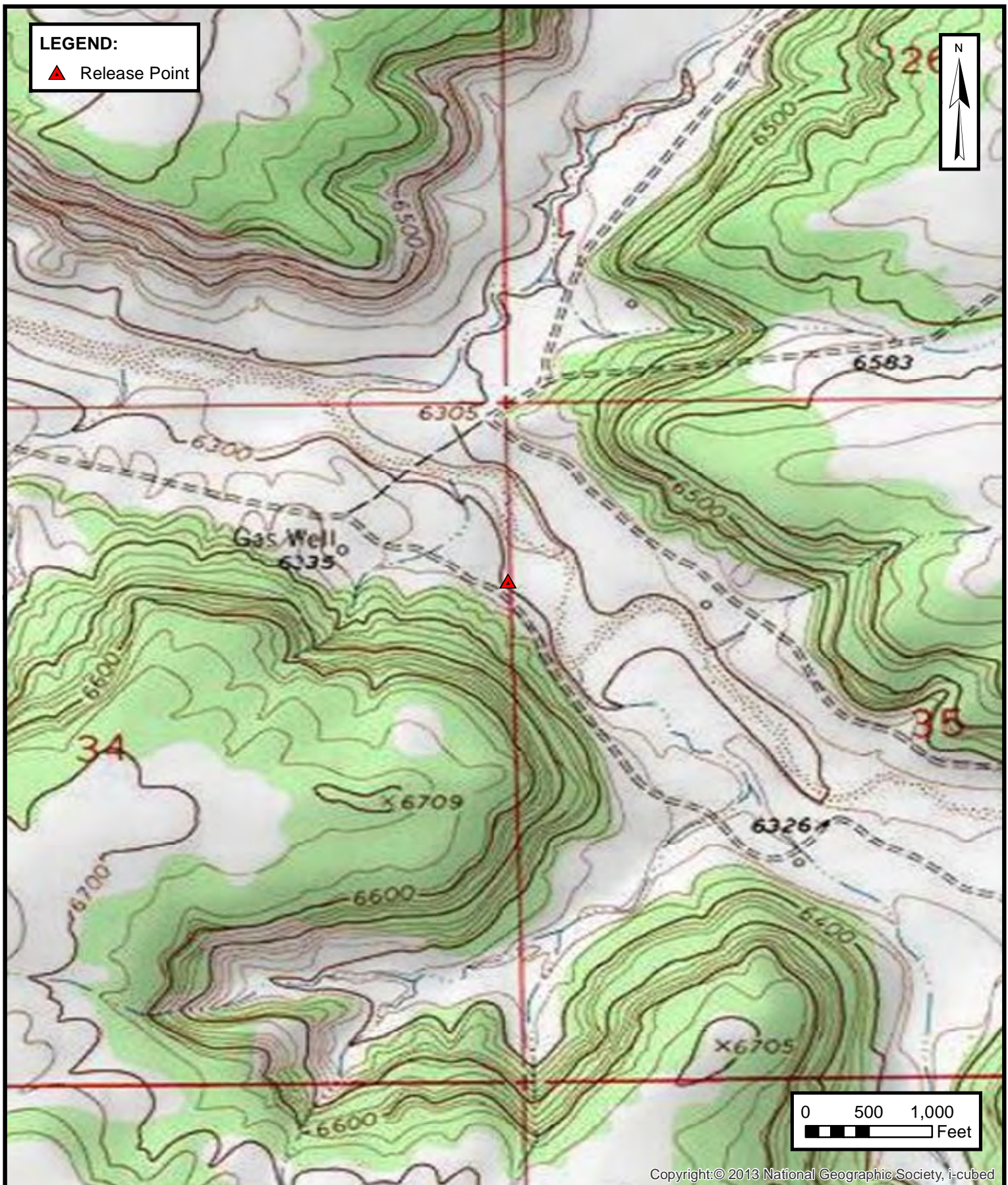
5.3 Reliance

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.

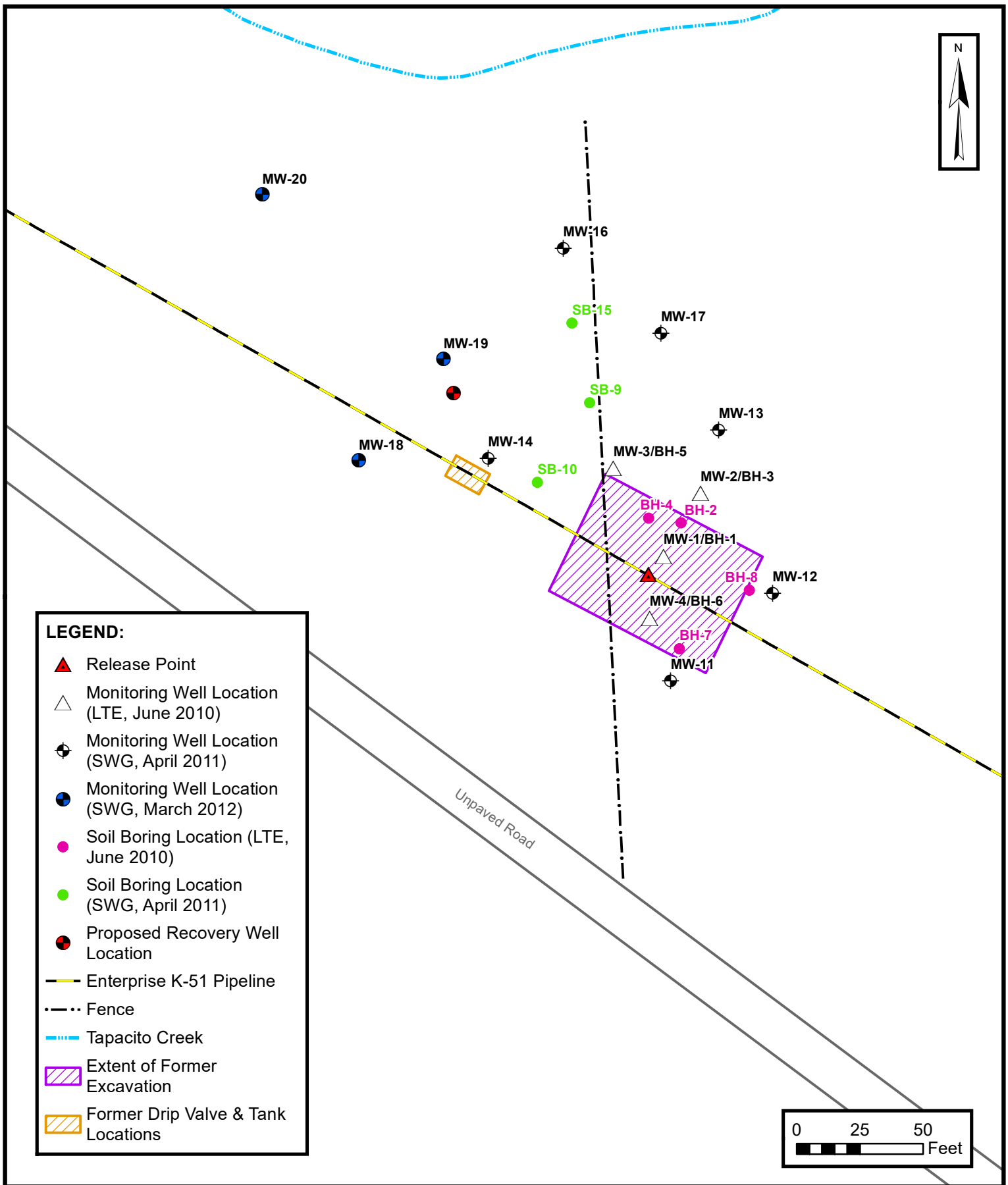


APPENDIX A

Figures

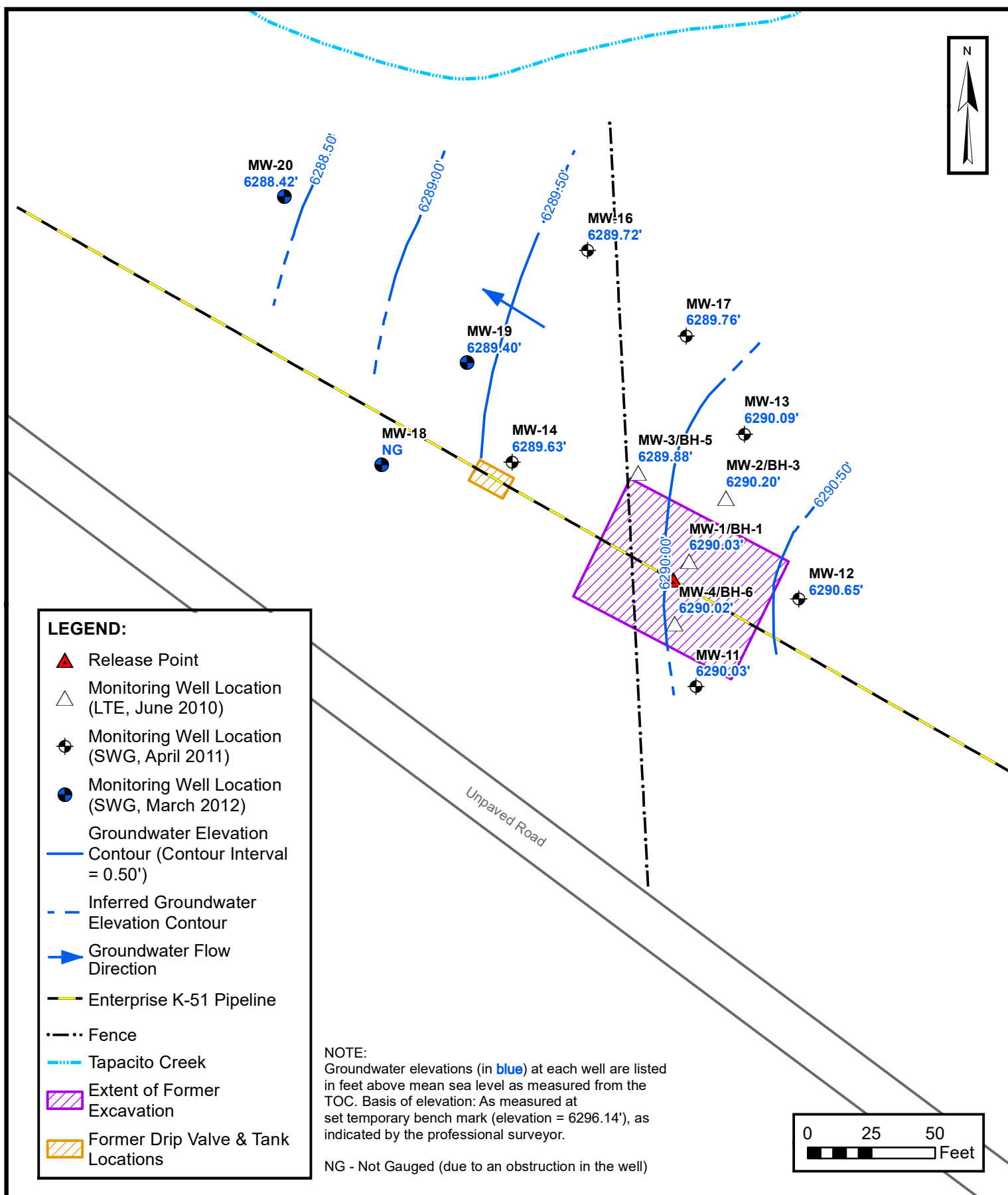






SITE MAP

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

**GROUNDWATER GRADIENT MAP (MAY 2022)**

ENTERPRISE FIELD SERVICES, LLC

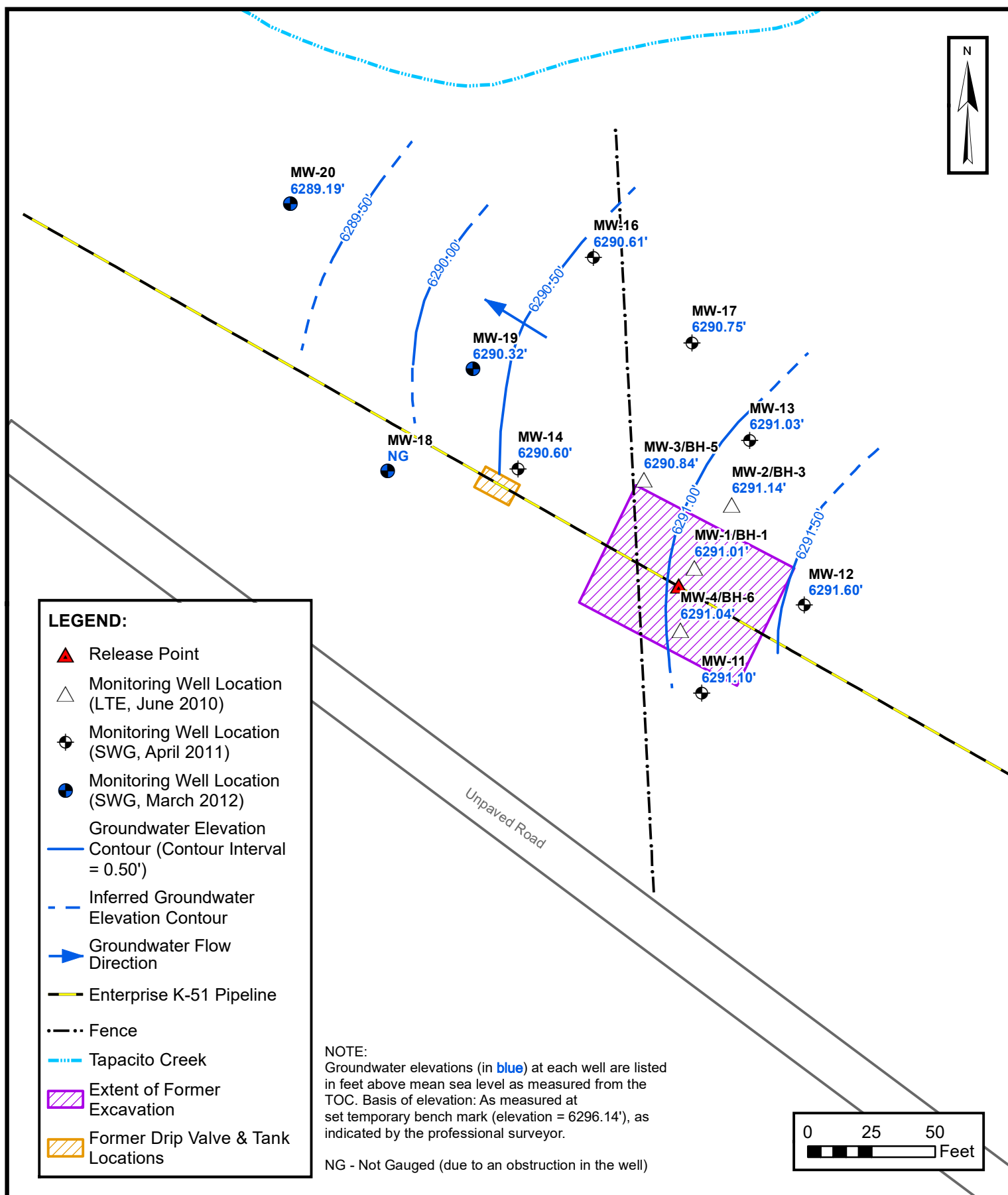
LATERAL K-51 PIPELINE RELEASE

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**4A**



GROUNDWATER GRADIENT MAP (NOVEMBER 2022)

ENTERPRISE FIELD SERVICES, LLC

LATERAL K-51 PIPELINE RELEASE

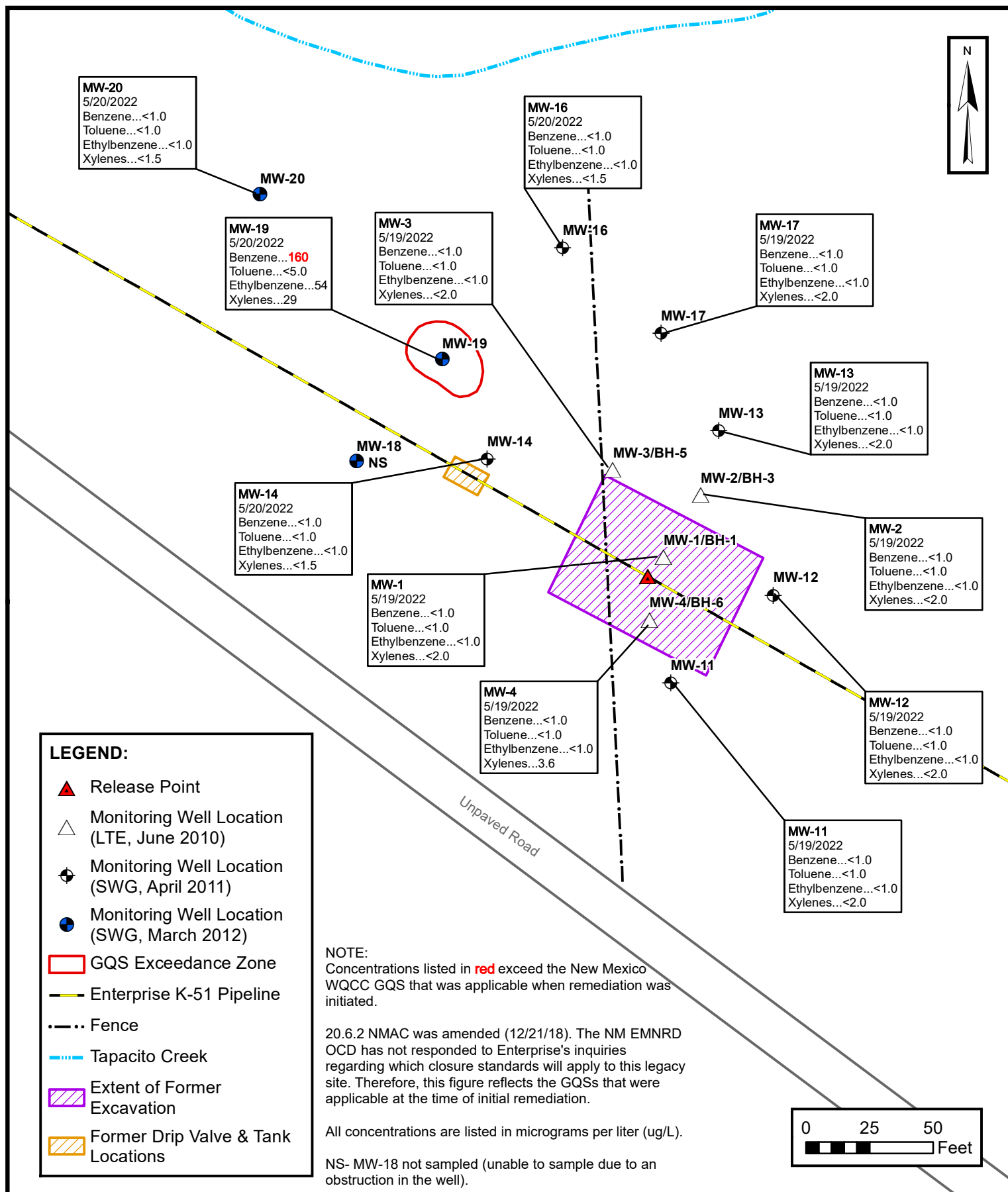
Unit Letter H, S34 and Unit Letter E, S35 T26N R6W, Rio Arriba County, New Mexico

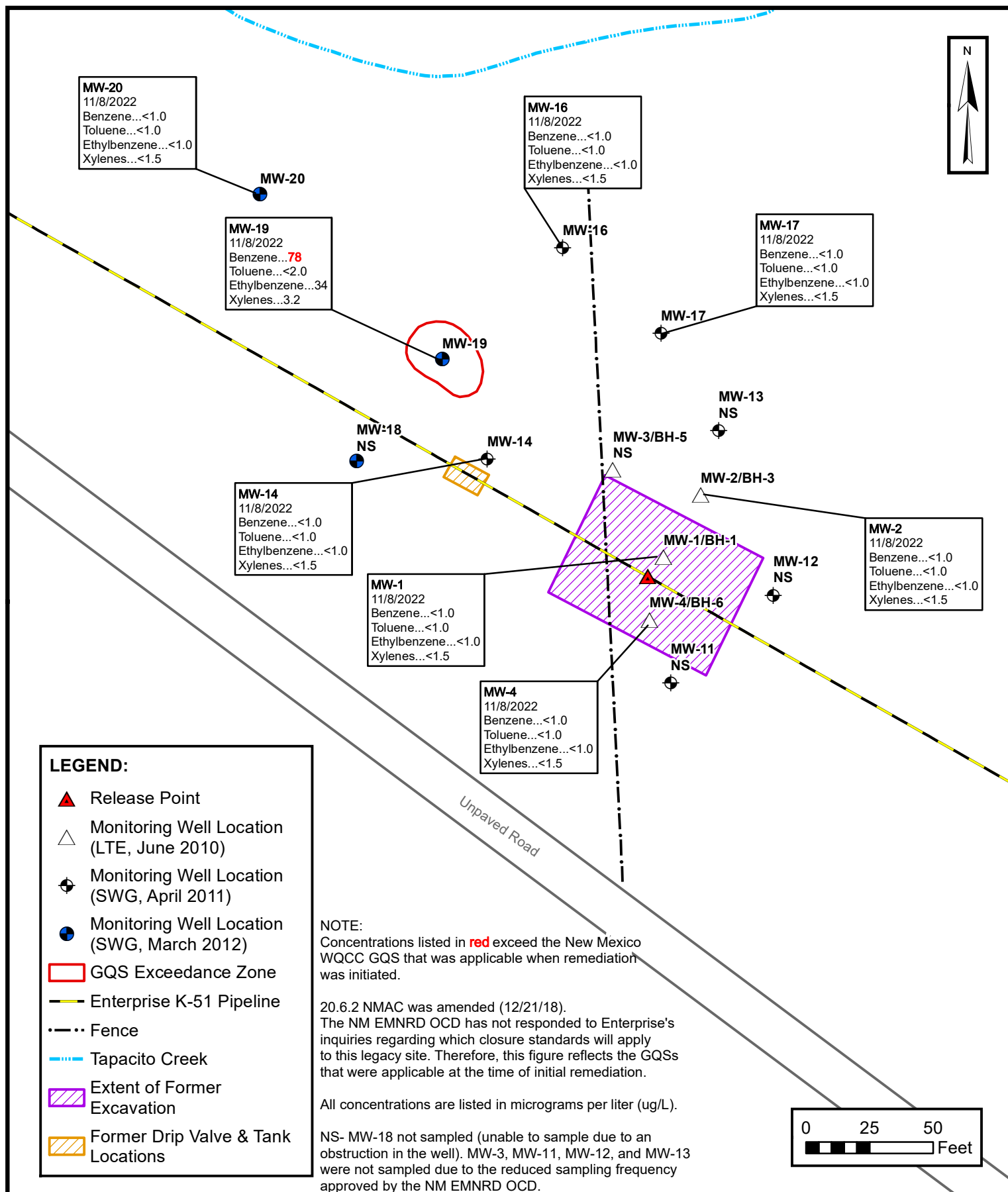
36.4465° N, 107.4461° W

Ensolum Project No.: 05A1226010

FIGURE

4B







APPENDIX B

Regulatory Correspondence

From: [Kyle Summers](#)
To: [Landon Daniell](#); [Ranee Deechilly](#)
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

in f

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 <bmstone@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)
tjlong@eprod.com



From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, May 13, 2022 8:06 AM
To: Long, Thomas <tjlong@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 <tjlong@eprod.com>
Sent: Friday, May 13, 2022 7:52 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Miller, Greg <GEMiller@eprod.com>; Kyle Summers <ksummers@ensolum.com>
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
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From: Long, Thomas
Sent: Thursday, November 18, 2021 8:12 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>
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
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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



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
SMA Sample - Open Excavation							
Excavation	4.21.10	7,000	13,000	540	5,200	NA	NA
Monitoring Wells Installed by LTE							
MW-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
	11.6.14	32	<1.0	27	61	NA	NA
	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 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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-2	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
	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



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-3	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-4	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
	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-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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
Monitoring Wells Installed by Apex TITAN (formerly Southwest Geoscience)							
MW-11	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-12	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-13	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.21 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-14	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
	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							
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 Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-16	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
	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 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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-17	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
	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
	11.7.16	<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							
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 Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-18	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	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
	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	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	NS
	11.8.22	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-19	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
	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							
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 Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-20	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
	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	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

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

^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.

^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-3, MW-11, MW-12, and MW-13 to annual events.

* = Monitoring well purged/sampled utilizing disposable bailer during this event

µg/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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-1	4.21.11	ND	11.80	ND	17.71	7.71-17.71	6300.89	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
	11.30.15	ND	10.90	ND				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				6289.20
	5.19.22	ND	10.86	ND				6290.03
	11.8.22	ND	9.88	ND				6291.01



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-2	4.21.11	ND	10.55	ND	18.45	8.45-18.45	6299.82	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
	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				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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-3	4.21.11	ND	11.30	ND	18.39	8.39-18.39	6300.22	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				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
	11.30.15	ND	10.40	ND				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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-4	4.21.11	ND	11.90	ND	19.47	9.47-19.47	6300.91	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				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	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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-11	4.21.11	ND	11.98	ND	19.07	9.07-19.07	6301.19	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
	11.30.15	ND	11.18	ND				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



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-12	4.21.11	ND	8.96	ND	18.03	8.03-18.03	6299.08	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
	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	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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-13	4.21.11	ND	9.07	ND	17.90	7.90-17.90	6298.27	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				6289.16
	6.27.13	ND	9.94	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
	11.6.14	ND	8.83	ND				6289.44
	5.28.15	ND	8.32	ND				6289.95
	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				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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-14	4.21.11	ND	12.54	ND	18.88	8.88-18.88	6301.20	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	ND	12.23	ND				6288.97
	5.28.15	ND	11.67	ND				6289.53
	11.30.15	ND	11.62	ND				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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-16	4.21.11	ND	12.06	ND	18.01	8.01-18.01	6299.89	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
	5.28.15	ND	10.56	ND				6289.33
	11.30.15	ND	10.39	ND				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 ^A	ND	11.57	ND				6288.32
	5.19.22	ND	10.17	ND				6289.72
	11.8.22	ND	9.28	ND				6290.61



TABLE 2
Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-17	4.21.11	ND	9.90	ND	18.16	8.16-18.16	6298.57	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
	11.30.15	ND	8.87	ND				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



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-18	3.20.12	ND	16.60	ND	NA	NA	6304.77	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
	5.25.16	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	Blockage						Blockage
	5.19.22	Blockage						Blockage
	11.8.22	Blockage						Blockage



TABLE 2

Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-19	3.20.12	ND	15.69	ND	23.22	13.22-23.22	6303.80	6288.11
	6.19.12 ^B	16.25	16.32	0.07				6287.52
	9.19.12 ^B	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
	5.25.16	ND	14.28	ND				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				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

**TABLE 2**
**Lateral K-51 Pipeline Release (2010)
GROUNDWATER ELEVATIONS**

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-20	3.20.12	ND	25.82	ND	30.51	20.51-30.51	6312.59	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
	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
	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

* - corrected for presence of phase-separated 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.

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

^A - Suspected misgauge.

^B - No visual verification. May not be hydrocarbon.

NA - Not Available

ND - Not Detected



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205930
Date Reported: 5/26/2022

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 1 of 9

CLIENT: Ensolum, LLC

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2205930**

Date Reported: 5/26/2022

CLIENT: Ensolum, LLC

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	1.0		µg/L	1	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	1	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	1	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 3 of 9

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205930
Date Reported: 5/26/2022

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	Qual	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.	B	Analyte detected in the associated Method Blank	Page 4 of 9
	D	Sample Diluted Due to Matrix	E	Estimated value	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Limit	
	S	% Recovery outside of range due to dilution or matrix interference			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205930
Date Reported: 5/26/2022

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: BRM	
Benzene	ND	1.0		µg/L	1	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	1	5/21/2022 7:23:00 PM	C88182
Xylenes, Total	ND	2.0		µg/L	1	5/21/2022 7:23:00 PM	C88182
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	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.	B	Analyte detected in the associated Method Blank	Page 5 of 9
	D	Sample Diluted Due to Matrix	E	Estimated value	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Limit	
	S	% Recovery outside of range due to dilution or matrix interference			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205930
Date Reported: 5/26/2022

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	Qual	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.	B	Analyte detected in the associated Method Blank	Page 6 of 9
	D	Sample Diluted Due to Matrix	E	Estimated value	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Limit	
	S	% Recovery outside of range due to dilution or matrix interference			

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Page 7 of 9

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205930
Date Reported: 5/26/2022

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	1.0		µg/L	1	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	1	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	1	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.	B	Analyte detected in the associated Method Blank	Page 8 of 9
	D	Sample Diluted Due to Matrix	E	Estimated value	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Limit	
	S	% Recovery outside of range due to dilution or matrix interference			

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	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch ID: C88182		RunNo: 88182							
Prep Date:	Analysis Date: 5/21/2022		SeqNo: 3126102		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	97.7	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		96.8	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBW	Batch ID: C88182		RunNo: 88182							
Prep Date:	Analysis Date: 5/21/2022		SeqNo: 3126103		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	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: MW-11	Batch ID: C88182		RunNo: 88182							
Prep Date:	Analysis Date: 5/21/2022		SeqNo: 3126113		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	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: MW-11	Batch ID: C88182		RunNo: 88182							
Prep Date:	Analysis Date: 5/21/2022		SeqNo: 3126114		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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		



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 Number: 2205930

RcptNo: 1

Received By: Juan Rojas

5/20/2022 7:05:00 AM

Completed By: Tracy Casarrubias

5/20/2022 8:16:48 AM

Reviewed By: *sc 5/20/22*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *jr 5/20/22*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205992
Date Reported: 6/1/2022

CLIENT: Ensolum

Client Sample ID: MW-16

Project: Lateral K 51 2010

Collection Date: 5/20/2022 9:15:00 AM

Lab ID: 2205992-001

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	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205992
Date Reported: 6/1/2022

CLIENT: Ensolum

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2205992
Date Reported: 6/1/2022

CLIENT: Ensolum
Project: Lateral K 51 2010
Lab ID: 2205992-004

Client Sample ID: MW-19
Collection Date: 5/20/2022 10:55:00 AM
Received Date: 5/21/2022 9:45:00 AM

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: CCM
Benzene	160	5.0		µg/L	5	5/25/2022 5:42:00 PM	SL88251
Toluene	ND	5.0		µg/L	5	5/25/2022 5:42:00 PM	SL88251
Ethylbenzene	54	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	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	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205992

01-Jun-22

Client: Ensolum

Project: Lateral K 51 2010

Sample ID: 100ng lcs	SampType: LCS		TestCode: EPA Method 8260: Volatiles Short List							
Client ID: LCSW	Batch ID: SL88251		RunNo: 88251							
Prep Date:	Analysis Date: 5/25/2022		SeqNo: 3130010		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	SampType: MBLK		TestCode: EPA Method 8260: Volatiles Short List							
Client ID: PBW	Batch ID: SL88251		RunNo: 88251							
Prep Date:	Analysis Date: 5/25/2022		SeqNo: 3130011		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 Quantitative Limit

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

B Analyte detected in the associated Method Blank

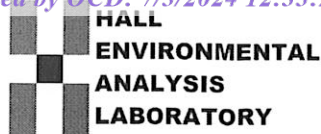
E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory
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 Number: 2205992

RcptNo: 1

Received By: Tracy Casarrubias 5/21/2022 9:45:00 AM

Completed By: Tracy Casarrubias 5/23/2022 8:25:16 AM

Reviewed By: *jn 5/23/22*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? ☐

Checked by: *KPC 5.23.22*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Not Present			

Chain-of-Custody Record

Client: Ensolum, LLC

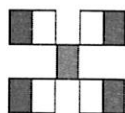
Mailing Address: 606 S. Rialto Ave, Suite 100
Albuquerque, NM 87102

Phone #:

email or Fax#: Ksummers@ensolum.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
 Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
 Project Name: Lateral K-51 (2010)
 Project #: 05A1226010



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 3.7 + 0.1 = 3.8 (°C)

Container Type and # 3x40mL vials Preservative Type HgCl₂ HEAL No. 2205992

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
5/20/22	9:15	W	MW-16	↓	↓	001
5/20/22	9:50	W	MW-14	↓	↓	002
5/20/22	10:25	W	MW-20	↓	↓	003
5/20/22	10:55	W	MW-19	↓	↓	004

TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
BTEX / MTBE / TMB's (8021)								

Remarks:

Received by: [Signature] Date: 5/20/22 Time: 1233

Relinquished by: [Signature]

Received by: [Signature] Date: 5/21/22 Time: 9:45

Relinquished by: [Signature]

Bill to Ensolum



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2211646
Date Reported: 11/18/2022

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2211646**

Date Reported: 11/18/2022

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2211646
Date Reported: 11/18/2022

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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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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	Qual	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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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: LCS	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: LCSW	Batch ID: SL92645	RunNo: 92645								
Prep Date:	Analysis Date: 11/16/2022	SeqNo: 3332334	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	SampType: MBLK	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: PBW	Batch ID: SL92645	RunNo: 92645								
Prep Date:	Analysis Date: 11/16/2022	SeqNo: 3332335	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 Quantitative Limit

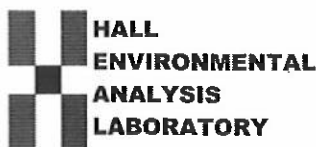
S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit



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 Number: 2211646

RcptNo: 1

Received By: Juan Rojas

11/10/2022 7:00:00 AM

Juan Rojas

Completed By: Tracy Casarrubias

11/10/2022 12:22:51 PM

Reviewed By: *JM 11/11/22*

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *TMC 11/11/22*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0	Good	Yes			

Chain-of-Custody Record

Client: Ensolium, LLC

Mailing Address: 606 Rio Grande, Suite 4A
Aztec, NM 87410

Phone #: _____

email or Fax#: Ksummers@Ensolium.com

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: Lateral K-51 (2016)

Project #: 05A1226010

Project Manager: K. Summers

Sampler: L. Daniel

On Ice: ☐ Yes ☐ No

of Coolers: 1

Cooler Temp (including CP): 0.1-0.1-0 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
11/8/22	11:25	W	MW-4	3x40ml H ₂ O	H ₂ O	001
11/8/22	12:00	W	MW-1			002
11/8/22	12:30	W	MW-2			003
11/8/22	12:55	W	MW-17			004
11/8/22	13:30	W	MW-16			005
11/8/22	14:00	W	MW-14			006
11/8/22	14:25	W	MW-19			007
11/8/22	15:00	W	MW-20			008

Date: 11/9/22 Time: 10:50

Relinquished by: [Signature]

Date: 11/9/22 Time: 1815

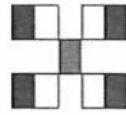
Relinquished by: [Signature]

Received by: [Signature] Date: 11/9/22 Time: 1058

Received by: [Signature] Date: 11/10/22 Time: 7:00

Remarks:

Bill to Ensolium


**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MIBF / TMBs (8021)		TPH:8015D(GRO / DRO / MRO)		8081 Pesticides/8082 PCBs		EDB (Method 504.1)		PAHs by 8310 or 8270SIMS		RCRA 8 Metals		Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄		8260 (VOA)		8270 (Semi-VOA)		Total Coliform (Present/Absent)	
X																			
X																			
X																			
X																			
X																			
X																			
X																			
X																			
X																			

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

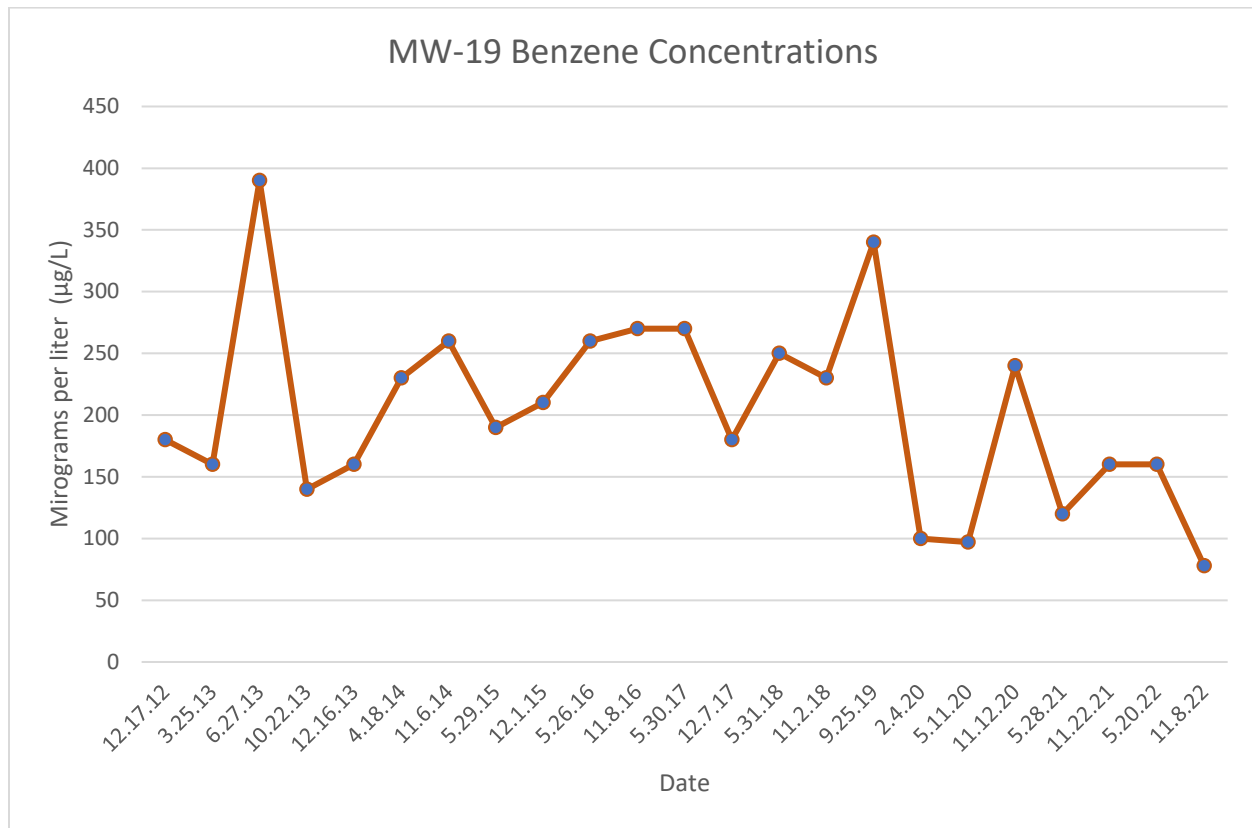


APPENDIX E

Benzene Concentration Chart

2022 Groundwater Monitoring Report
Enterprise Field Services, LLC
Lateral K-51 Pipeline Release (2010)

March 22, 2023





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.wapps.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 Submittal2), 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 (sdrewry@eprod.com) or phone (713-381-5696), or our project consultant Kyle Summers (ksummers@ensolum.com) 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 < ksummers@ensolum.com >

P.O. Box 4324
Houston, Texas 77210-4324
713.381.6500

1100 Louisiana Street
Houston, Texas 77002-5227
www.eppip.com

**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:

Raneet Deechilly
Project Manager

Kyle Summers
Senior Manager

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.

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.

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1.0 INTRODUCTION

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 (GQs) 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 GQs (*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 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.¹

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

¹ 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.

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_2)), 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-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.

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	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 GQS.¹ 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.¹
- 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.¹ 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.¹
- 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.

¹ 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.

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.¹ 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**.

¹ 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

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 aquifer 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.

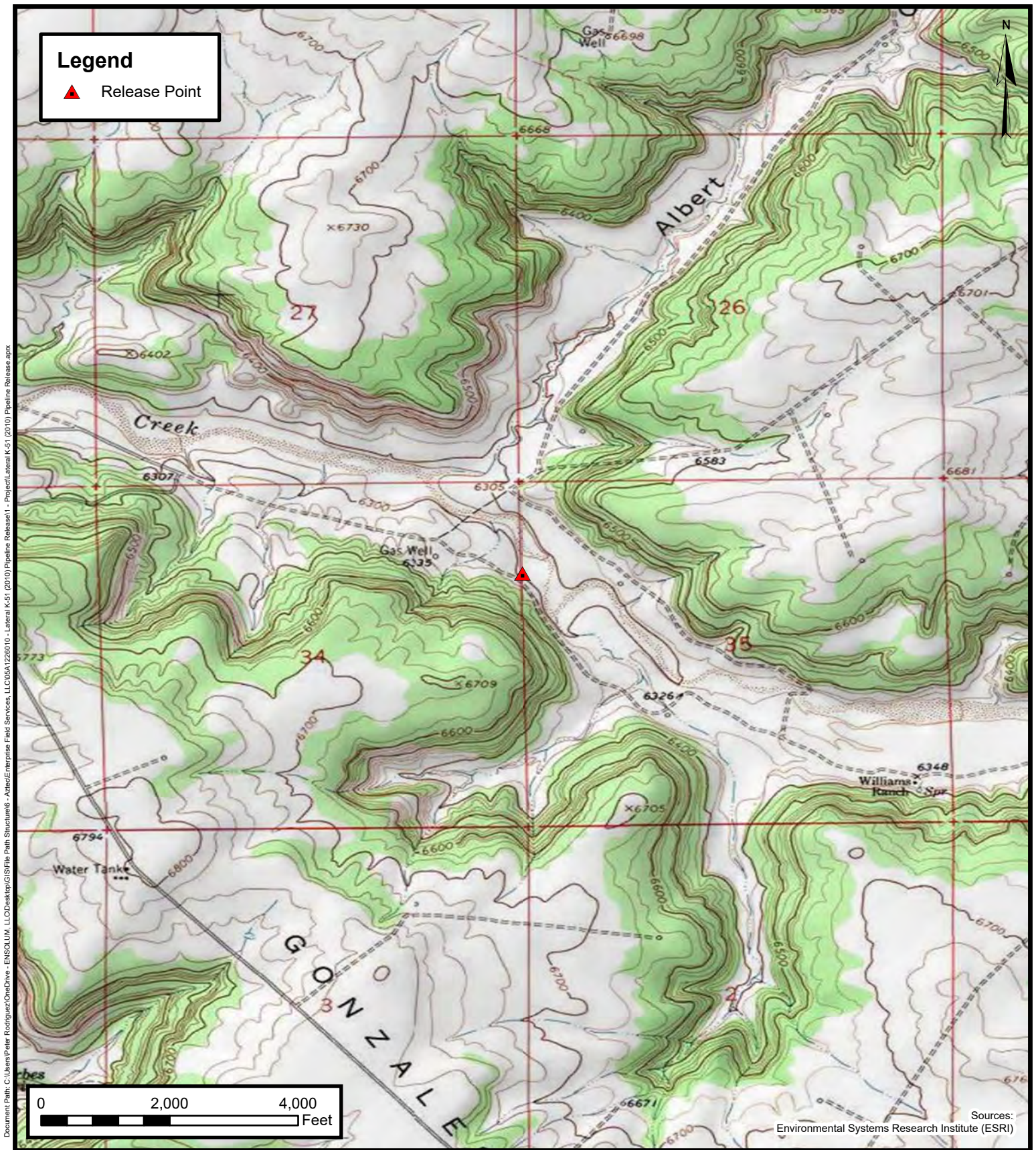
5.3 Reliance

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.



APPENDIX A

Figures



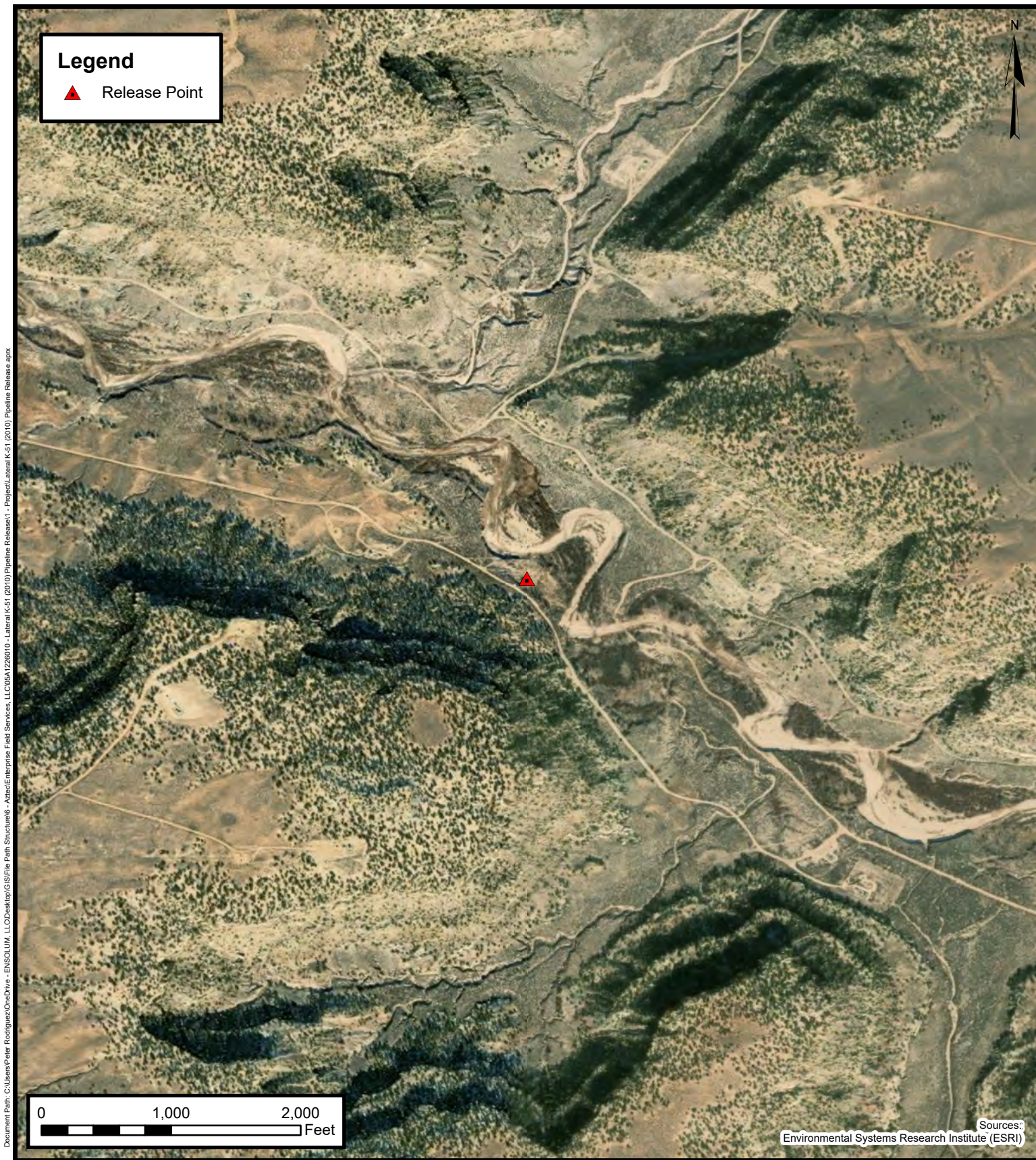
Topographic Map

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° N, -107.4461° W

FIGURE

1



Site Vicinity Map

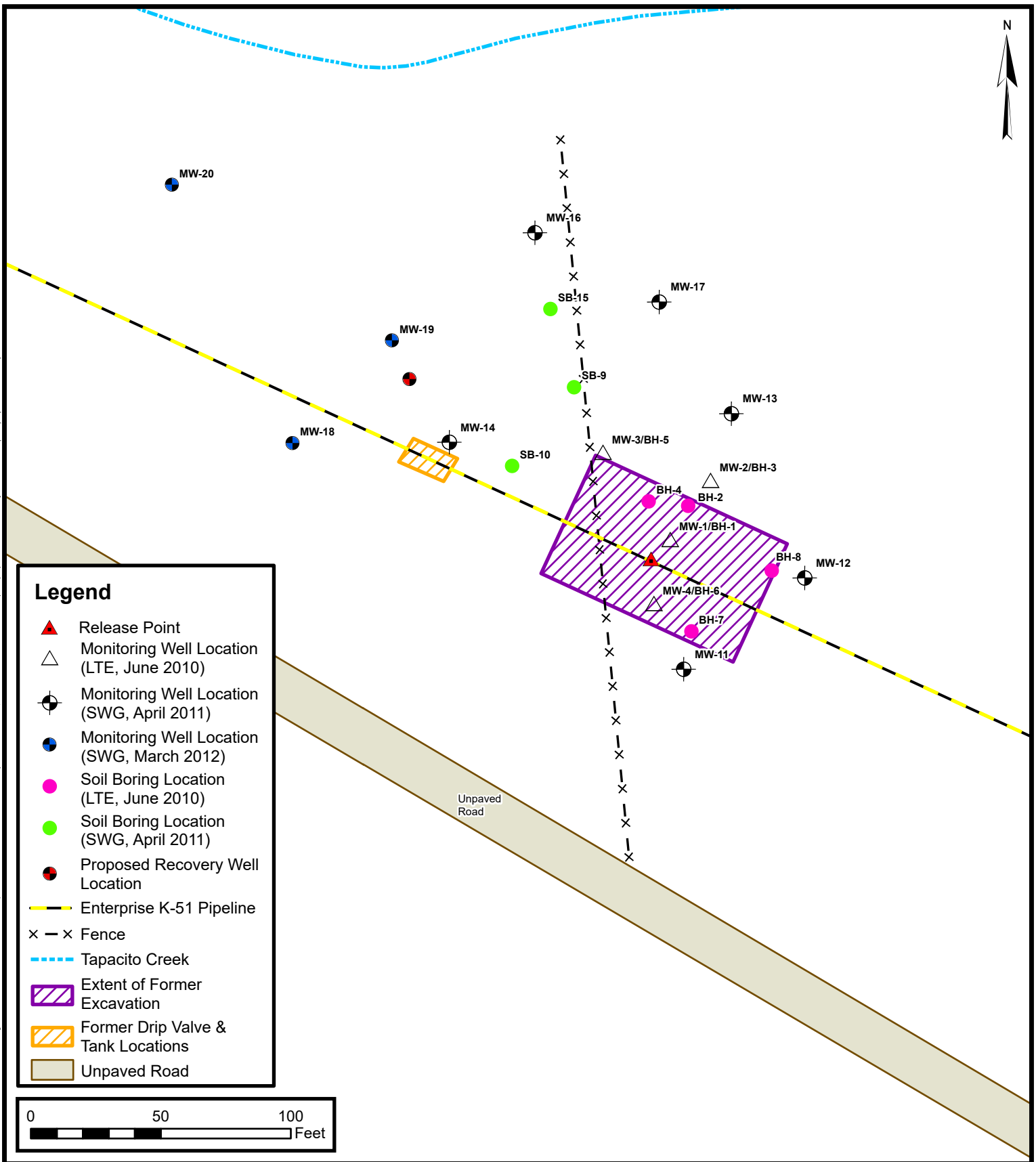
Enterprise Field Services, LLC
Lateral K-51 (2010) Pipeline Release
Project Number: 05A1226010

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

FIGURE

2

Document Path: C:\Users\Peter.Rodriguez\OneDrive - ENSOLUM\LLC\Desktop\GIS\Enterprise Field Services, LLC\05A1226010 - Lateral K-51 (2010) Pipeline Release.aprx



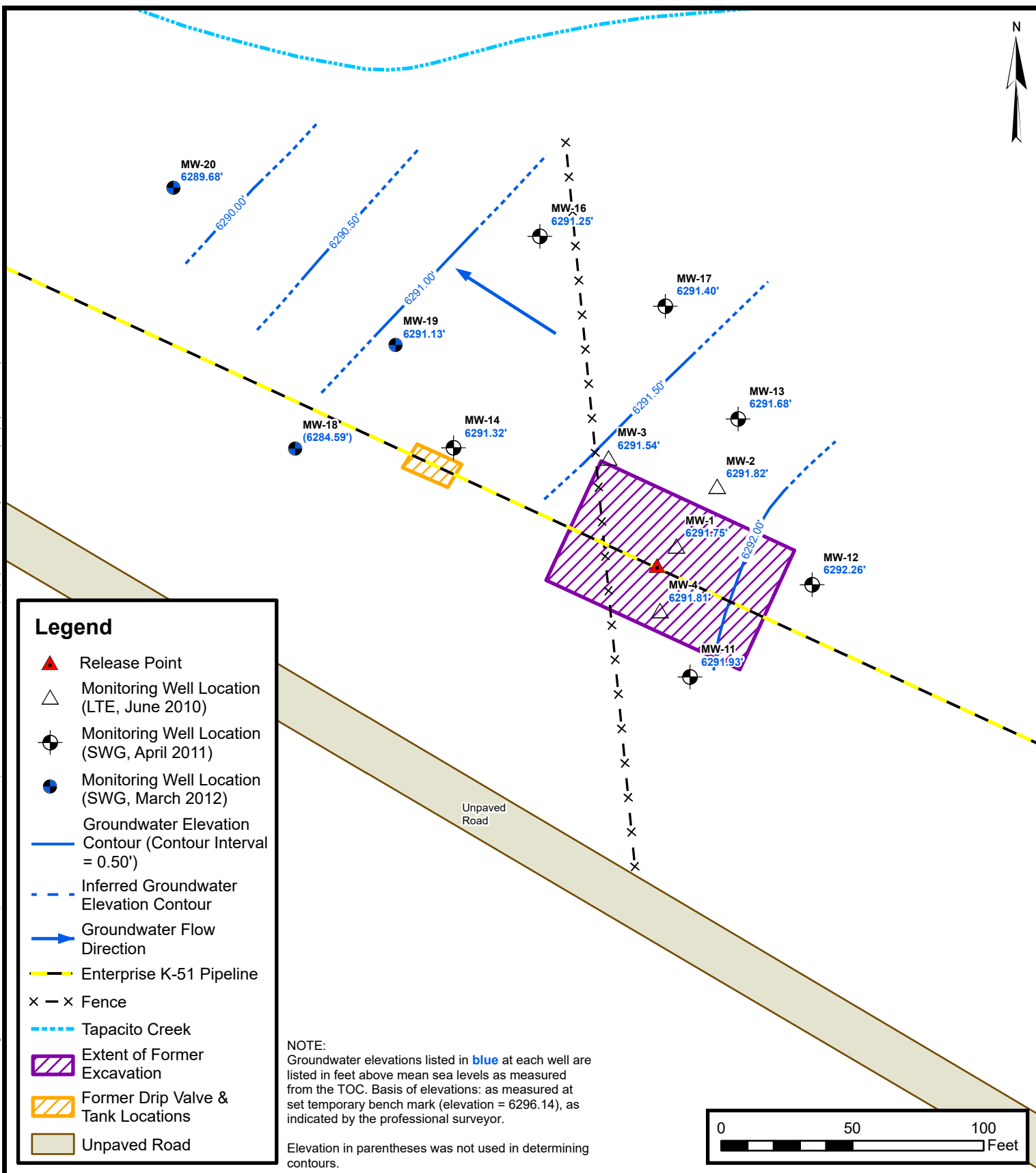
Site Map

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

Document Path: C:\Users\Peter.Rodriguez\OneDrive - ENSOLUM\LLC\Desktop\GIS\Enterprise Field Services, LLC\05A1226010 - Lateral K-51 (2010) Pipeline Release.aprx

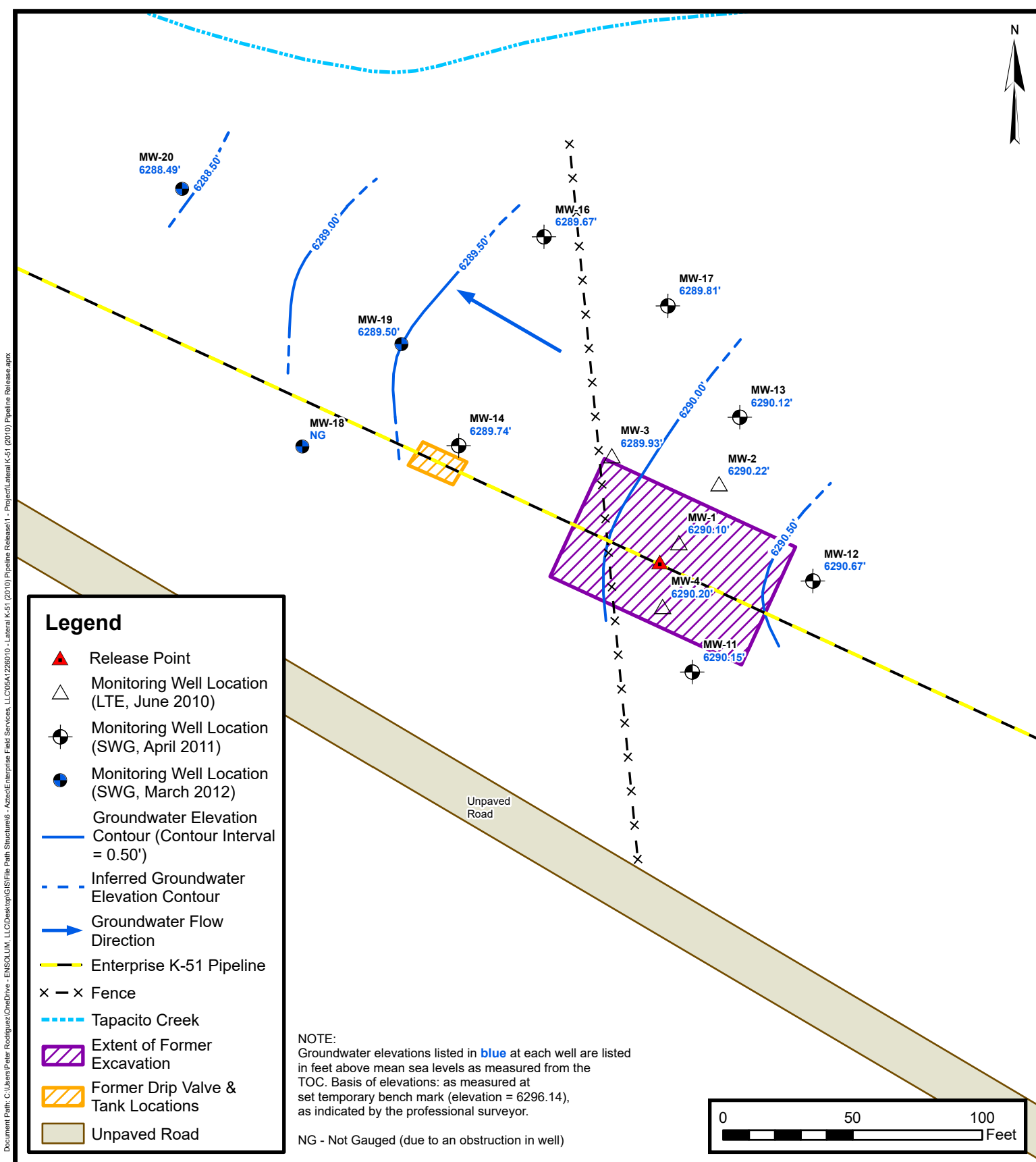


Groundwater Gradient Map (May 2023)

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° N, -107.4461° W

FIGURE
4A

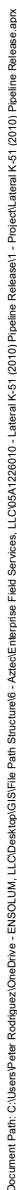


Groundwater Gradient Map (November 2023)

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° N, -107.4461° W

FIGURE
4B







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 t

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 <bmstone@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 <tjlong@eprod.com>

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

To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Craun, James N <jcraun@blm.gov>

Cc: Stone, Brian <bmstone@eprod.com>; Drewry, Scott <sdrewry@eprod.com>; Fields, Jon <JEFFIELDS@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 <tjlong@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 | nelson.velez@emnrd.nm.gov

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



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

Sent: Monday, May 22, 2023 1:39 PM

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

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)
tjlong@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 <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

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)
tjlong@eprod.com



From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, May 13, 2022 8:06 AM
To: Long, Thomas <tjlong@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 <tjlong@eprod.com>
Sent: Friday, May 13, 2022 7:52 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Miller, Greg <GEMiller@eprod.com>; Kyle Summers <ksummers@ensolum.com>
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)
tjlong@eprod.com



From: Long, Thomas
Sent: Thursday, November 18, 2021 8:12 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>
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)
tjlong@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



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
SMA Sample - Open Excavation							
Excavation	4.21.10	7,000	13,000	540	5,200	NA	NA
Monitoring Wells Installed by LTE							
MW-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
	11.6.14	32	<1.0	27	61	NA	NA
	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



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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-2	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
	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
	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-3	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 ^B	NS	NS	NS	NS	NS	NS
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.20.23 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-4	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
	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 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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
Monitoring Wells Installed by Apex TITAN (formerly Southwest Geoscience)							
MW-11	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 ^B	NS	NS	NS	NS	NS	NS
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.20.23 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-12	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.22 ^B	NS	NS	NS	NS	NS	NS
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.20.23 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-13	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
	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 ^B	NS	NS	NS	NS	NS	NS
	5.19.22	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.8.21 ^B	NS	NS	NS	NS	NS	NS
	5.25.23	<1.0	<1.0	<1.0	<2.0	NA	NA
	11.20.23 ^B	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-14	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
	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
	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) 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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-16	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
	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
	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-17	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
	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
	11.7.16	<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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-18	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	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
	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	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	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							
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 Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-19	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
	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
	5.25.23	57	<5.0	20	<10	NA	NA
	11.20.23	200	<2.0	41	<4.0	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)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10 ^A	750 ^A	750 ^A	620 ^A	NE	NE
MW-20	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
	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	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.

^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.

^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-3, MW-11, MW-12, and MW-13 to annually.

* = Monitoring well purged/sampled utilizing disposable bailer during this event

^C = This well was sampled, but the anomalous elevation suggests that the sampled water represents subsurface water that was trapped above the collapsed screen due to the recent high amounts of precipitation.

µg/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



TABLE 2 Lateral K-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-1	4.21.11	ND	11.80	ND	17.71	7.71-17.71	6300.89	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
	11.30.15	ND	10.90	ND				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				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-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-2	4.21.11	ND	10.55	ND	18.45	8.45-18.45	6299.82	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
	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				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) GROUNDWATER ELEVATIONS								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-3	4.21.11	ND	11.30	ND	18.39	8.39-18.39	6300.22	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				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
	11.30.15	ND	10.40	ND				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
	5.25.23	ND	8.68	ND				6291.54
	11.20.23	ND	10.29	ND				6289.93



TABLE 2 Lateral K-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-4	4.21.11	ND	11.90	ND	19.47	9.47-19.47	6300.91	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				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	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 (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-11	4.21.11	ND	11.98	ND	19.07	9.07-19.07	6301.19	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
	11.30.15	ND	11.18	ND				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
	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 (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-12	4.21.11	ND	8.96	ND	18.03	8.03-18.03	6299.08	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
	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	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								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-13	4.21.11	ND	9.07	ND	17.90	7.90-17.90	6298.27	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				6289.16
	6.27.13	ND	9.94	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
	11.6.14	ND	8.83	ND				6289.44
	5.28.15	ND	8.32	ND				6289.95
	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				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
	5.25.23	ND	6.59	ND				6291.68
	11.20.23	ND	8.15	ND				6290.12



TABLE 2 Lateral K-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-14	4.21.11	ND	12.54	ND	18.88	8.88-18.88	6301.20	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	ND	12.23	ND				6288.97
	5.28.15	ND	11.67	ND				6289.53
	11.30.15	ND	11.62	ND				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
	5.25.23	ND	9.88	ND				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 (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-16	4.21.11	ND	12.06	ND	18.01	8.01-18.01	6299.89	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
	5.28.15	ND	10.56	ND				6289.33
	11.30.15	ND	10.39	ND				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 ^A	ND	11.57	ND				6288.32
	5.19.22	ND	10.17	ND				6289.72
	11.8.22	ND	9.28	ND				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 (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-17	4.21.11	ND	9.90	ND	18.16	8.16-18.16	6298.57	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
	11.30.15	ND	8.87	ND				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
	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) GROUNDWATER ELEVATIONS								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-18	3.20.12	ND	16.60	ND	NA	NA	6304.77	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
	5.25.16	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	Blockage						Blockage
	5.19.22	Blockage						Blockage
	11.8.22	Blockage						Blockage
	5.25.23 ^C	ND	13.98	ND				6284.59
	11.20.23	Blockage						Blockage



TABLE 2 Lateral K-51 Pipeline Release (2010) GROUNDWATER ELEVATIONS								
Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-19	3.20.12	ND	15.69	ND	23.22	13.22-23.22	6303.80	6288.11
	6.19.12 ^B	16.25	16.32	0.07				6287.52
	9.19.12 ^B	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
	5.25.16	ND	14.28	ND				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				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
	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 (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Depth of Well (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevation (feet AMSL)	Groundwater Elevation* (feet AMSL)
MW-20	3.20.12	ND	25.82	ND	30.51	20.51-30.51	6312.59	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
	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
	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

* - corrected for presence of phase-separated 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.

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

^A - Suspected misgauge.

^B - No visual verification. May not be hydrocarbon.

^C - The anomalous 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.

NA - Not Available

ND - Not Detected



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305D64
Date Reported: 6/6/2023

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	1.0		µg/L	1	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	1	5/31/2023 5:30:46 PM	R97131
Xylenes, Total	ND	2.0		µg/L	1	5/31/2023 5:30:46 PM	R97131
Surr: 4-Bromofluorobenzene	103	52.4-148		%Rec	1	5/31/2023 5:30:46 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	1.1	1.0		µg/L	1	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	1	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
Surr: 4-Bromofluorobenzene	102	52.4-148		%Rec	1	5/31/2023 5:54:17 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 2 of 12

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305D64
Date Reported: 6/6/2023

CLIENT: ENSOLUM

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305D64
Date Reported: 6/6/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305D64
Date Reported: 6/6/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.	B	Analyte detected in the associated Method Blank	Page 7 of 12
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Limit	
	S	% Recovery outside of standard limits. If undiluted results may be estimated.			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305D64
Date Reported: 6/6/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305D64
Date Reported: 6/6/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	1.0		µg/L	1	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	1	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	1	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2305D64**

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	57	5.0	D	µg/L	5	6/1/2023 12:33:59 PM	BW9713:
Toluene	ND	5.0	D	µg/L	5	6/1/2023 12:33:59 PM	BW9713:
Ethylbenzene	20	5.0	D	µg/L	5	6/1/2023 12:33:59 PM	BW9713:
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	5	6/1/2023 12:33:59 PM	BW9713:

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305D64

06-Jun-23

Client: ENSOLUM

Project: Lateral K 51

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch ID: R97131		RunNo: 97131							
Prep Date:	Analysis Date: 5/31/2023		SeqNo: 3526605		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	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBW	Batch ID: R97131		RunNo: 97131							
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			

Sample ID: 2305d64-001ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: MW-11	Batch ID: R97131		RunNo: 97131							
Prep Date:	Analysis Date: 6/1/2023		SeqNo: 3526608		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	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: MW-11	Batch ID: R97131		RunNo: 97131							
Prep Date:	Analysis Date: 6/1/2023		SeqNo: 3526609		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 Quantitative 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 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	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSW	Batch ID: BW97133			RunNo: 97133						
Prep Date:	Analysis Date: 6/1/2023			SeqNo: 3528228		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	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBW	Batch ID: BW97133			RunNo: 97133						
Prep Date:	Analysis Date: 6/1/2023			SeqNo: 3528229		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 Quantitative 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



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 Number: 2305D64

RcptNo: 1

Received By: Tracy Casarrubias 5/26/2023 6:55:00 AM

Completed By: Tracy Casarrubias 5/26/2023 8:02:24 AM

Reviewed By: *JS 5-26-23*

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *JS 5/26/23*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Phone number not on COC- TMC 5/25/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Ensolam, LLCMailing Address: 606 S. Redmond StreetAlbuquerque, NM 87110

Phone #: _____

email or Fax#: ksamners@ensolam.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Lateral K-51

Project #:

05A1226010

Project Manager:

K. SummersSampler: L. DainelliOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CP): 49-02-4.7 (°C)

Container Type and #

Preservative Type

HEAL No.

3x4000L H-Cl₂7305D06340010020030040050060070080090100110120130140150160170180190200210220230240250260270280290300310320330340350360370380390400410420430440450460470480490500510520530540550560570580590600610620630640650660670680690700710720730740750760770780790800810820830840850860870880890900910920930940950960970980991001011021031041051061071081091101111121131141151161171181191201211221231241251261271281291301311321331341351361371381391401411421431441451461471481491501511521531541551561571581591601611621631641651661671681691701711721731741751761771781791801811821831841851861871881891901911921931941951961971981992002012022032042052062072082092102112122132142152162172182192202212222232242252262272282292302312322332342352362372382392402412422432442452462472482492502512522532542552562572582592602612622632642652662672682692702712722732742752762772782792802812822832842852862872882892902912922932942952962972982993003013



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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305E17
Date Reported: 6/1/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	1.1	1.0		µg/L	1	5/31/2023 10:11:54 PM	R97131
Toluene	ND	1.0		µg/L	1	5/31/2023 10:11:54 PM	R97131
Ethylbenzene	ND	1.0		µg/L	1	5/31/2023 10:11:54 PM	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	R97131

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2305E17
Date Reported: 6/1/2023

CLIENT: ENSOLUM

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	1.0		µg/L	1	5/31/2023 10:35:21 PM	R97131
Toluene	ND	1.0		µg/L	1	5/31/2023 10:35:21 PM	R97131
Ethylbenzene	ND	1.0		µg/L	1	5/31/2023 10:35:21 PM	R97131
Xylenes, Total	ND	2.0		µg/L	1	5/31/2023 10:35:21 PM	R97131
Surr: 4-Bromofluorobenzene	97.1	52.4-148		%Rec	1	5/31/2023 10:35:21 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	1.0		µg/L	1	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	1	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	1	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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2305E17

01-Jun-23

Client: ENSOLUM

Project: Lateral K 51

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch ID: R97131			RunNo: 97131							
Prep Date:	Analysis Date: 5/31/2023			SeqNo: 3526605		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	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles							
Client ID: PBW	Batch ID: R97131			RunNo: 97131							
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 Quantitative 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



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 Number: 2305E17

RcptNo: 1

Received By: Tracy Casarrubias 5/27/2023 9:00:00 AM

Completed By: Tracy Casarrubias 5/27/2023 10:48:16 AM

Reviewed By: *TM 5/30/23*

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *TM 5/27/23*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Phone number is missing on COC- TMC 5/27/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Enabany LLCMailing Address: 600 S. Rio Grande Suite 100

Phone #: _____

email or Fax#: K. Summers@enabany.comQA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Lateral K-51

Project #:

05A1226010

Project Manager:

K. Summers

Sampler:

On Ice: ☒ Yes ☐ No Yogi# of Coolers: 1Cooler Temp (including CF): 21-02 = 1.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Date Time Matrix Sample Name

5/26/23 11:10 W MW-14

5/26/23 11:45 W MW-18

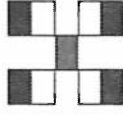
5/26/23 12:25 W MW-20

Trip Blank

-ML 5/26/23

Date: 5/26/23 Time: 1414Relinquished by: [Signature]Received by: [Signature]Date: 5/26/23 Time: 1416Date: 5/26/23 Time: 1700Relinquished by: [Signature]Received by: [Signature]Date: 5/27/23 Time: 9:00

Remarks:

Bill to EnabanyHALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

TPH:8015D(GRO / DRO / MRO)	
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

BTX / MTBE / TMBs (8021)

X

X

X



Environment Testing

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,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2311B25
Date Reported: 12/5/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2311B25
Date Reported: 12/5/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2311B25
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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2311B25
Date Reported: 12/5/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2311B25
Date Reported: 12/5/2023

CLIENT: ENSOLUM
Project: Lateral K 51 2010
Lab ID: 2311B25-005

Client Sample ID: MW-16
Collection Date: 11/20/2023 11:50:00 AM
Received Date: 11/21/2023 7:10:00 AM

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2311B25
Date Reported: 12/5/2023

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JJP
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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: 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.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2311B25

05-Dec-23

Client: ENSOLUM
Project: Lateral K 51 2010

Sample ID: 2311b25-001ams		SampType: MS			TestCode: EPA Method 8021B: Volatiles					
Client ID: MW-4		Batch ID: BW101445			RunNo: 101445					
Prep Date:		Analysis Date: 11/28/2023			SeqNo: 3733206		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		SampType: MSD			TestCode: EPA Method 8021B: Volatiles					
Client ID: MW-4		Batch ID: BW101445			RunNo: 101445					
Prep Date:		Analysis Date: 11/28/2023			SeqNo: 3733207		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 lcs		SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSW		Batch ID: BW101445			RunNo: 101445					
Prep Date:		Analysis Date: 11/28/2023			SeqNo: 3733217		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		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID: PBW		Batch ID: BW101445		RunNo: 101445						
Prep Date:		Analysis Date: 11/28/2023		SeqNo: 3733218		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			

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 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

Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2311B25

RcptNo: 1

Received By: Juan Rojas

11/21/2023 7:10:00 AM

Juan Rojas

Completed By: Cheyenne Cason

11/21/2023 2:19:05 PM

Cheyenne Cason

Reviewed By:

*11-21-23*Chain of Custody1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? CourierLog In3. 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 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 broken? Yes ☐ No ☒

11. Does paperwork match bottle labels?

(Note discrepancies on chain of custody)

Yes ☒ No ☐*NY 11/21/23*# of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

12. Are matrices correctly identified on Chain of Custody?

Yes ☒ No ☐

Adjusted?

13. Is it clear what analyses were requested?

Yes ☒ No ☐

14. Were all holding times able to be met?

Yes ☒ No ☐

(If no, notify customer for authorization.)

Checked by:

*SCM 11/21/23*Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Christine W

Date:

11/21/23

By Whom:

Cheyenne C.

Via:

☐ eMail☒ Phone☐ Fax☐ In Person

Regarding:

Time discrepancy on 002 + 003

Client Instructions:

Labels are correct

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande, Suite 4
Albuquerque, NM 87410

Phone #: _____

email or Fax#: ksummers@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Date	Time	Matrix	Sample Name
11/20/23	10:10	W	MW-4
11/20/23	10:35	W	MW-2
11/20/23	11:00	W	MW-1
11/20/23	11:25	W	MW-17
11/20/23	11:50	W	MW-16
11/20/23	12:20	W	MW-14
11/20/23	12:50	W	MW-20
11/20/23	13:35	W	MW-19

Date: 11/20/23 Time: 1546

Date: 11/20/23 Time: 1800

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Lateral K-51 (2016)

Project #:

05A1226010

Project Manager:

K. Summers

Sampler:

L. DanielsOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CFI): 6.9+0.2=7.1 (°C)

Container Type and #

Preservative Type

HEAL No.

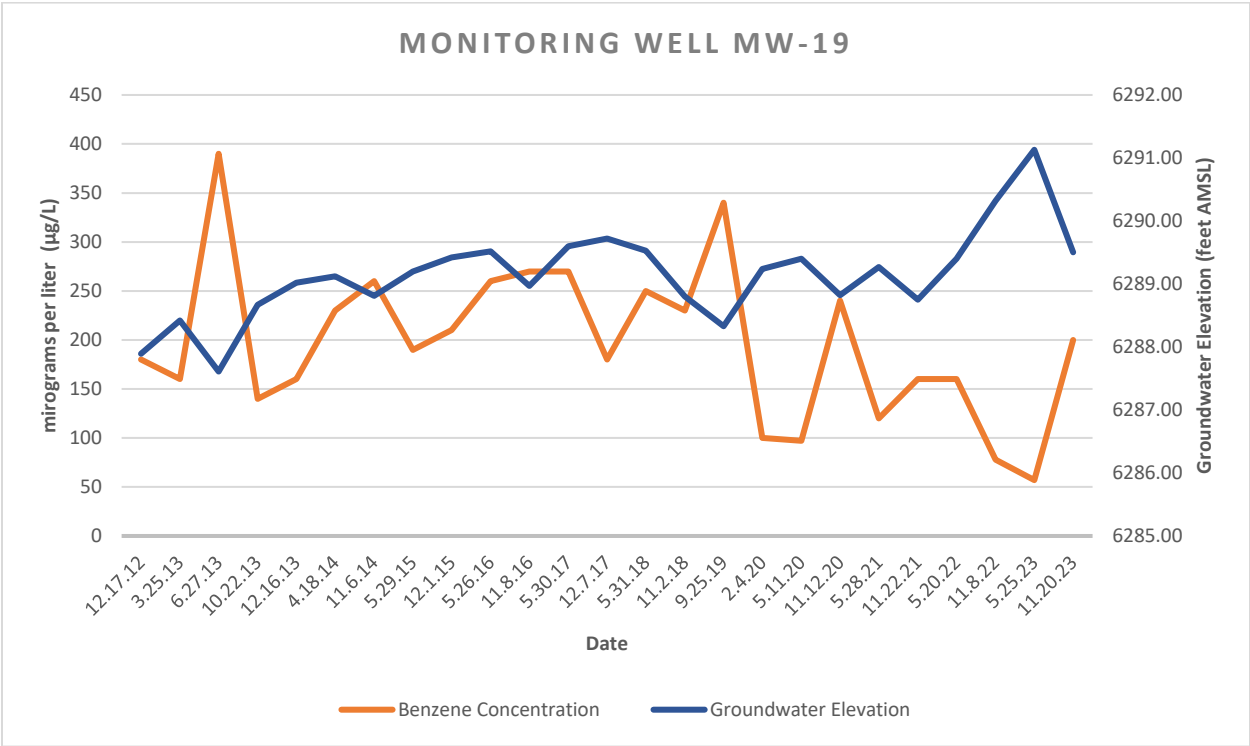
3x 40 Gallon High 2
001
002
003
004
005
006
007
0082311375001002003004005006007008001002



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
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District III
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Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
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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: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID:
	241602
	Action Number: 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