APPROVED
By Nelson Velez at 4:51 pm, Dec 28, 2021

RP # 3R-438

AGWMR

2020

Review of 2020 Groundwater Monitoring Report: Content satisfactory

1. Follow recommendations stated within 2020 Groundwater Monitoring Report.
a. continue SA-GWM&S activities to evaluate the stability of COC concentrations in subsurface groundwater conduct additional site-specific aquifer characterization
b. conduct additional site-specific aquifer characterization & testing to evaluate the options to remediate areas of GWQ exceedances
c. submit a Stage 2 Abatement Plan once the Stage 1 Abatement Plan has been deemed administratively complete
d. the suspension of monitoring and sampling activities of MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14, and MW-15 is approved.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Scott Drewry Title: P.G.

Signature: Scott Drewry Date: 8/11/2021

OCD Only

Received by: _____ Date: _____

Enterprise Products

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

ENTERPRISE PRODUCTS OPERATING LLC

August 10, 2021

Submitted online via OCD E-Permitting:
https://wwwapps.emnrd.state.nm.us/OCD/OCDPermitting/default.aspx

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

Submittal: 2020 *Groundwater Monitoring Report* *(Ensolum, March 19, 2021)*
RE: Enterprise Field Services, LLC
Trunk 6C Pipeline - Kutz Wash Release (09/22/11)
San Juan County, New Mexico [SW ¼, S26 T28N R11W (36.63202° N, 107.97400° W)]
OCD RP: 3R-438; OCD Abatement Plan No. 131

Dear Mr. Smith:

Enterprise Products Operating LLC (Enterprise), on behalf of Enterprise Field Services LLC, is pleased to submit to the New Mexico (NM) Energy, Minerals & Natural Resources Department (EMNRD) – Oil Conservation Division (OCD) an electronic copy of the above-referenced document prepared by Ensolum, LLC (Ensolum) and dated March 19, 2021. The subject document is associated with the September 22, 2011 discovery of a release of natural gas condensate from the Enterprise Trunk 6C pipeline located near the Kutz Wash at the above-referenced location (the "Site"). The attached document summarizes ongoing semi-annual (SA) groundwater monitoring and sampling (GWM&S) activities that occurred at the Site in June 2020 and November 2020 (the "reporting period"). The GWM&S activities were performed to further evaluate dissolved-phased hydrocarbon (DPH), or constituents of concern (COC), concentrations in groundwater.

Data presented in the attached report indicate that COC concentrations in excess of the applicable Water Quality Control Commission (WQCC) *Groundwater Quality Standards* (*GQSs)* remain at the Site in two monitoring wells (MW-1 and MW-17). Additionally, with the possible exception of downgradient well MW-15, the DPH plume (MW-1 and MW-17) is currently delineated by monitor wells MW-2, MW-4, MW 6 and MW-11.

Based on the information presented in the attached report, Enterprise plans to: 1) continue SA-GWM&S activities to evaluate the stability of COC concentrations in subsurface groundwater, 2) conduct additional site-specific aquifer characterization & testing to evaluate the options to remediate areas of GWQ exceedances, and 3) prepare a Stage 2 Abatement Plan (once the *Stage 1 Abatement Plan* has been fully approved and implemented).

As previously requested in the cover letter for the *2018 Groundwater Monitoring Report*, **Enterprise respectfully requests the plugging and abandonment** of (or the suspension of monitoring and sampling activities of): MW-3, MW-5, MW-7, MW-9, MW-12 and MW-13 (and possibly MW-8, MW-10 and MW-14).

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 feel free to contact me any time at 713-381-8780, or at gemiller@eprod.com.

Sincerely,

Gregory E. Miller, P.G.
Supervisor, Environmental

Rodney M. Sartor, REM
Sr. Director, Environmental

cc: BLM, Farmington, NM – Mr. Ryan Joyner <6251 College Blvd., Suite A, Farmington, NM 87402>
ec: Ensolum, Houston, TX – Mr. Marc E. Gentry <MGentry@ensolum.com>

ENSOLUM

2020 GROUNDWATER MONITORING REPORT

Property:

Trunk 6C Kutz Wash Pipeline Release
SW ¼, S26 T28N R11W
San Juan County, New Mexico

New Mexico EMNRD OCD RP No. 3RP-438
Abatement Plan No. 131
Incident ID No. NBBB1219837368, NJK1201237146

March 19, 2021
Ensolum Project No. 05A1226011

Prepared for:

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

Prepared by:

Ranee Deechilly
Environmental Scientist

Landon Daniell
Staff Geologist

Kyle Summers
Senior Project Manager

ENSOLUM

2020 GROUNDWATER MONITORING REPORT
EXECUTIVE SUMMARY

This report documents the 2020 groundwater monitoring activities at the Trunk 6C Kutz Wash pipeline release site, referred to hereinafter as the "Site".

The Site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way in the southwest (SW) quarter (1/4) of Section 26, Township 28 North, Range 11 West, in San Juan County, New Mexico.

On September 22, 2011, a pipeline release of natural gas and associated pipeline liquids was discovered at the Site and the pipeline was subsequently repaired. A Site assessment conducted by Animas Environmental Services, LLC (AES) during October 2011 identified benzene, toluene, ethylbenzene, and total xylenes (BTEX), and total petroleum hydrocarbon (TPH) concentrations in "test hole" excavation soil and groundwater that exceeded the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria for soils and above the New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) for groundwater.

During November 2011, AES advanced eight (8) soil borings at the Site to further delineate the extent of hydrocarbon affected soil and potentially impacted groundwater. Resulting soil and groundwater analytical data indicated constituent of concern (COC) concentrations above the New Mexico EMNRD OCD closure criteria and WQCC GQSs.

During September 2012, AES advanced nine (9) additional soil borings/monitoring wells at the Site to further evaluate the extent of dissolved phase COCs in groundwater. Based on laboratory analytical results, COCs were not identified in soil above the New Mexico EMNRD OCD closure criteria. However, COCs were identified in groundwater above the WQCC GQSs. On October 16, 2013, four (4) additional soil borings/monitoring wells were advanced by AES. Soil and groundwater samples collected from soil boring/monitoring well MW-10 exhibited COC concentrations above the New Mexico EMNRD OCD closure criteria and WQCC GQSs.

On October 28, 2013, another leak was discovered in the vicinity of the original release and the pipeline was subsequently repaired and placed back in service. AES collected 20 discrete soils samples from the pipeline repair excavation and the resulting analytical data identified COC concentrations above the New Mexico EMNRD OCD closure criteria. In addition, aquifer pumping tests were conducted in four (4) wells by AES to estimate hydraulic conductivity. The estimated average hydraulic conductivity values of 5.27E-03 centimeters per second (cm/sec) and 8.81E-03 cm/sec were determined from drawdown and recovery data analysis, respectively.

During September 2016, Apex TITAN, Inc., (Apex) advanced five (5) soil borings at the Site. Three (3) of these soil borings were completed as groundwater monitoring wells. COCs were identified in soil above the New Mexico EMNRD OCD closure criteria at soil borings/monitoring wells MW-15 (capillary fringe), MW-17, and SB-18A (capillary fringe). In addition, COC concentrations were identified in groundwater above the WQCC GQSs in monitoring well MW-17.

During February 2019, Enterprise assigned management of the project to Ensolum, LLC (Ensolum).

On May 23, 2019, Enterprise submitted a Revised Stage 1 Abatement Plan for this Site to the New Mexico EMNRD OCD. The New Mexico EMNRD OCD has not responded or approved the plan at this time, and Enterprise has resumed semi-annual groundwater monitoring of the Site.

In a letter to the New Mexico EMNRD OCD dated April 21, 2020, Enterprise requested the plugging and abandonment or the suspension of sampling of the following wells: MW-3, MW-5, MW-7, MW-9, MW-12, and MW-13.

Groundwater sampling events were conducted by Ensolum during June 2020 and November 2020. These groundwater monitoring events were performed to further evaluate the concentrations of COCs in groundwater over time and to monitor the generally declining COC concentrations 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 0.008 feet per foot (ft/ft) across the Site.

- Benzene was reported at concentrations exceeding the New Mexico WQCC GQS of 10 microgram per liter (µg/L) in ground water samples collected from monitoring well MW-1 during the June 2020 and November 2020 sampling events and monitoring MW-17 during the June 2020 sampling event. The groundwater samples collected from the remaining monitoring wells during the two 2020 sampling events do not exhibit COC concentrations above the applicable WQCC GQSs (see footnote in report).

- The results from the 2020 groundwater sampling events at the Site generally continue to demonstrate declining or stable COC concentrations in groundwater.

Ensolum offers the following recommendations:

- Report the groundwater monitoring results to the New Mexico EMNRD OCD.

- Continue semi-annual groundwater monitoring at the Site.

- Once approved by the New Mexico EMNRD OCD, implement additional Site-specific aquifer testing as described in the Stage 1 Abatement Plan.

- After the Stage 1 Abatement Plan has been fully implemented, prepare a Stage 2 Abatement Plan, or proceed “at-risk” with the removal of residual impacted soils to expedite natural attenuation prior to EMNRD OCD approval of the Stage 1 Abatement Plan.

- Determine if the New Mexico EMNRD OCD will allow the suspension or reduction of sampling frequency for monitoring wells MW-3, MW-5, MW-7, MW-9, MW-12, and MW-13, due to the documented history of COC non-detections.

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2020 GROUNDWATER MONITORING REPORT

New Mexico EMNRD OCD RP No. 3RP-438
Abatement Plan No. 131

Ensolum Project No. 05A1226011

1.0 INTRODUCTION

This report documents the 2020 groundwater monitoring activities at the Trunk 6C Kutz Wash Pipeline Release site, referred to hereinafter as the "Site".

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Trunk 6C Kutz Wash Pipeline Release
Incident ID	NBBB1219837368, NJK1201237146
Location:	36.63202° North, 107.97400° West Southwest (SW) ¼ of Section 26, Township 28 North, Range 11 West San Juan County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On September 22, 2011, a pipeline release of an unknown volume of natural gas and associated liquids was discovered at the Site and the pipeline was subsequently repaired. Animas Environmental Services, LLC (AES) collected one (1) soil sample from the floor of the repair excavation. Based on field screening results, the soil sample exhibited elevated levels of volatile organic compounds (VOCs). A site assessment was conducted by AES on October 11, 2011, which included the collection of soil samples from four (4) test holes (TP-1 through TP-4) that were advanced near the release area, as well as groundwater samples from two (2) of the four (4) test holes. Based on laboratory analytical results, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and total petroleum hydrocarbons (TPH) were identified in soils from two (2) of the test holes (TP-1 and TP-2) at concentrations above the New Mexico EMNRD OCD closure criteria. The test hole water samples collected from TP-2 and TP-4 exhibited concentrations of BTEX above New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs). Additional details regarding the initial site assessment activities are provided in the *Release Assessment Report, dated October 28, 2011- AES.*

During November 2011, AES advanced eight (8) soil borings (SB-1 through SB-8) at the Site to further delineate the extent of hydrocarbon affected soil and impacted groundwater. Laboratory analytical results for the soil and groundwater samples collected from the soil borings identified constituent of concern (COC) concentrations in soil above the New Mexico EMNRD OCD closure criteria (SB-2, SB-7, and SB-8) and in groundwater above the WQCC GQSs (SB-2W, SB-3W, and SB-7W) *(Site Investigation Report, dated February 20, 2012 – AES)*.

During September 2012, nine (9) additional soil borings were advanced at the Site by AES to further evaluate the extent of dissolved phase COCs in groundwater. Subsequent to advancement, the soil borings were completed as groundwater monitoring wells (MW-1 through MW-9). Laboratory analytical results for soil samples did not indicate concentrations of COCs above the New Mexico EMNRD OCD closure criteria. However, COCs were confirmed in groundwater above the WQCC GQSs *(Groundwater Investigation*

Report, dated October 31, 2012 – AES).
On October 16, 2013, AES advanced four (4) additional soil borings/monitoring wells (MW-10 through MW-13) to further evaluate the extent of COCs in groundwater. Laboratory analytical results indicated COC concentrations in soil and groundwater from soil boring/monitoring well MW-10 were present at levels above the New Mexico EMNRD OCD closure criteria and the WQCC GQSs (*3rd Quarter 2013 Groundwater Monitoring and Well Installation Report, dated December 10, 2013 and 4th Quarter 2013 Groundwater Monitoring and Continued Investigation Report, dated July 23, 2014 – AES*).

During September 2016, Enterprise retained Apex TITAN, Inc., (Apex) to perform environmental site investigation activities at the Site to further evaluate and delineate the concentrations of COCs in soil and groundwater. Five (5) soil borings were advanced and three (3) of the soil borings were completed as groundwater monitoring wells MW-14, MW-15, and MW-17. Laboratory analytical results indicated COC concentrations in soil (MW-15 (capillary fringe), MW-17, and SB-18A (capillary fringe)) and groundwater (MW-17) were above the New Mexico EMNRD OCD closure criteria and the WQCC GQSs (*Supplemental Environmental Site Investigation (September 2016) and Annual Groundwater Monitoring Report (June and December 2016), dated February 13, 2017 – Apex*).

During February 2019, Enterprise assigned management of the project to Ensolum, LLC (Ensolum).

On May 23, 2019, Enterprise submitted a Revised Stage 1 Abatement Plan for this Site to the New Mexico EMNRD OCD. The plan proposed that semi-annual groundwater monitoring continue, and that additional Site-specific aquifer testing be implemented prior to the submittal of a Stage 2 Abatement Plan. The New Mexico EMNRD OCD has not responded or approved the plan at this time, and Enterprise has resumed semi-annual groundwater monitoring of the Site.

In a letter to the New Mexico EMNRD OCD dated April 21, 2020, Enterprise requested the plugging and abandonment or the suspension of sampling of the following wells: MW-3, MW-5, MW-7, MW-9, MW-12, and MW-13. This request was based on COC concentrations reported below detection limits since 2013 (or since 2015 for MW-3) and the COC plume is currently delineated by monitoring wells MW-2, MW-4, MW-6, and MW-11 (*Supplemental 2018 Annual Groundwater Monitoring Report Cover Letter, dated April 21, 2020 – Enterprise)*.

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 *Groundwater 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 events was to further evaluate the concentrations of COCs in groundwater over time and monitor the generally declining COC concentrations at the Site.

[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.

2.0 GROUNDWATER MONITORING

2.1 Groundwater Sampling Program

Groundwater sampling events were conducted during June 2020 and November 2020 by Ensolum. The groundwater sampling program consisted of the collection of one (1) groundwater sample from each of the 15 viable monitoring wells at the Site. Monitoring well MW-12 was not sampled during either sampling event due to an obstructed well screen/casing.

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 liquids (NAPL).

- Each viable two (2) inch diameter monitoring well was sampled utilizing micro-purge low-flow sampling techniques. Following the completion of the micro-purge process, one (1) groundwater sample was collected from each monitoring well.

- Low-flow or low-stress sampling refer 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.

- The casings of monitoring wells MW-10, MW-11, and MW-13 are approximately one (1) inch in diameter, which is smaller than the bladder pump diameter. As a result, these monitoring wells were purged utilizing a disposable bailer until effectively dry. Following the completion of the purging process and the recovery of groundwater to static levels, one (1) groundwater sample was collected from each monitoring well.

- The groundwater samples were collected in laboratory-supplied containers (pre-preserved with mercuric chloride ($HgCl_2$)), labeled/sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for 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 these groundwater sampling events were analyzed for BTEX utilizing United States Environmental Protection Agency (EPA) SW-846 Method #8021/8260.

A summary of the per-event analytes, sample matrix, sample frequency and EPA-approved methods for the two (2) sampling events are presented on the following table.

Analytes	Sample Matrix	No. of Samples (per event)	EPA Method
BTEX	Groundwater	15	SW-846 8021/8260

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. Based on gauging data, the groundwater flow direction at the Site is generally toward the northwest. The calculated gradient during both the June 2020 and November 2020 monitoring events averaged approximately 0.008 feet per foot (ft/ft) across the Site.

Groundwater elevation data collected during the June 2020 and November 2020 gauging events (as well as historical gauging data) are presented in **Table 2** (**Appendix B**). Groundwater gradient maps for the June 2020 and November 2020 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 June 2020 and November 2020 sampling events to the New Mexico WQCC GQSs.[1] The results of the groundwater sample 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**.

Monitoring well MW-12 was not sampled during these sampling events due to an obstructed well screen/casing.

June 2020

The June 2020 analytical results for monitoring wells MW-1 and MW-17 indicate benzene concentrations of 1,400 micrograms per liter (µg/L) and 17 µg/L, respectively, which exceed 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 June 2020 analytical result for monitoring well MW-1 indicates a toluene concentration of 740 µg/L, which is below the WQCC GQS of 750 µg/L.[1] The analytical results for the remaining monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 µg/L.[1]

The June 2020 analytical results for monitoring wells MW-1, MW-6, and MW-15 indicate ethylbenzene concentrations of 95 µg/L, 5.1 µg/L, and 4.7 µg/L, respectively, which are 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]

[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.

The June 2020 analytical results for monitoring wells MW-1, MW-8, and MW-15 indicate total xylenes concentrations of 270 µg/L, 1.9 µg/L, and 49 µg/L, respectively, which are below the WQCC GQS of 620 µg/L.[1] The analytical results for the remaining monitoring wells do not indicate total xylenes 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 June 2020 analytical results.

November 2020

The November 2020 analytical result for monitoring well MW-1 indicates a benzene concentration of 730 µg/L, which exceeds the WQCC GQS of 10 µg/L.[1] The analytical result for monitoring well MW-17 indicates a benzene concentration of 8.7 µg/L, which is 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 November 2020 analytical result for monitoring well MW-1 indicates a toluene concentration of 290 µg/L, which is below the WQCC GQS of 750 µg/L.[1] The analytical results for the remaining 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 2020 analytical result for monitoring well MW-1 indicates an ethylbenzene concentration of 61 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 November 2020 analytical results for monitoring wells MW-1 and MW-15 indicate total xylenes concentrations of 180 µg/L and 15 µg/L, respectively, which are below the WQCC GQS of 620 µg/L.[1] The analytical results for the remaining monitoring wells do not indicate total xylenes 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 2020 analytical results.

3.0 FINDINGS

Based on the evaluation of the analytical results from the 2020 groundwater monitoring events, Ensolum presents the following findings:

- The groundwater flow direction at the Site is generally towards the 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 ground water samples collected from monitoring well MW-1 during the June 2020 and November 2020 sampling events and monitoring MW-17 during the June 2020 sampling event. The groundwater samples collected from the remaining monitoring during the two 2020 sampling events did not exhibit COC concentrations above the applicable WQCC GQSs.[1]
- The results from the 2020 groundwater sampling events at the Site generally continue to demonstrate declining or stable COC concentrations in groundwater.

[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.

4.0 RECOMMENDATIONS

Based on these findings, Ensolum recommends the following:

- Report the groundwater monitoring results to the New Mexico EMNRD OCD.
- Continue semi-annual groundwater monitoring at the Site.
- Once approved by the New Mexico EMNRD OCD, implement additional Site-specific aquifer testing as described in the Stage 1 Abatement Plan.
- After the Stage 1 Abatement Plan has been fully implemented, prepare a Stage 2 Abatement Plan, or proceed "at-risk" with the removal of residual impacted soils to expedite natural attenuation prior to EMNRD OCD approval of the Stage 1 Abatement Plan.
- Determine if the New Mexico EMNRD OCD will approve the suspension or reduction of sampling frequency for monitoring wells MW-3, MW-5, MW-7, MW-9, MW-12, and MW-13, due to the documented history of COC non-detections.

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 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.

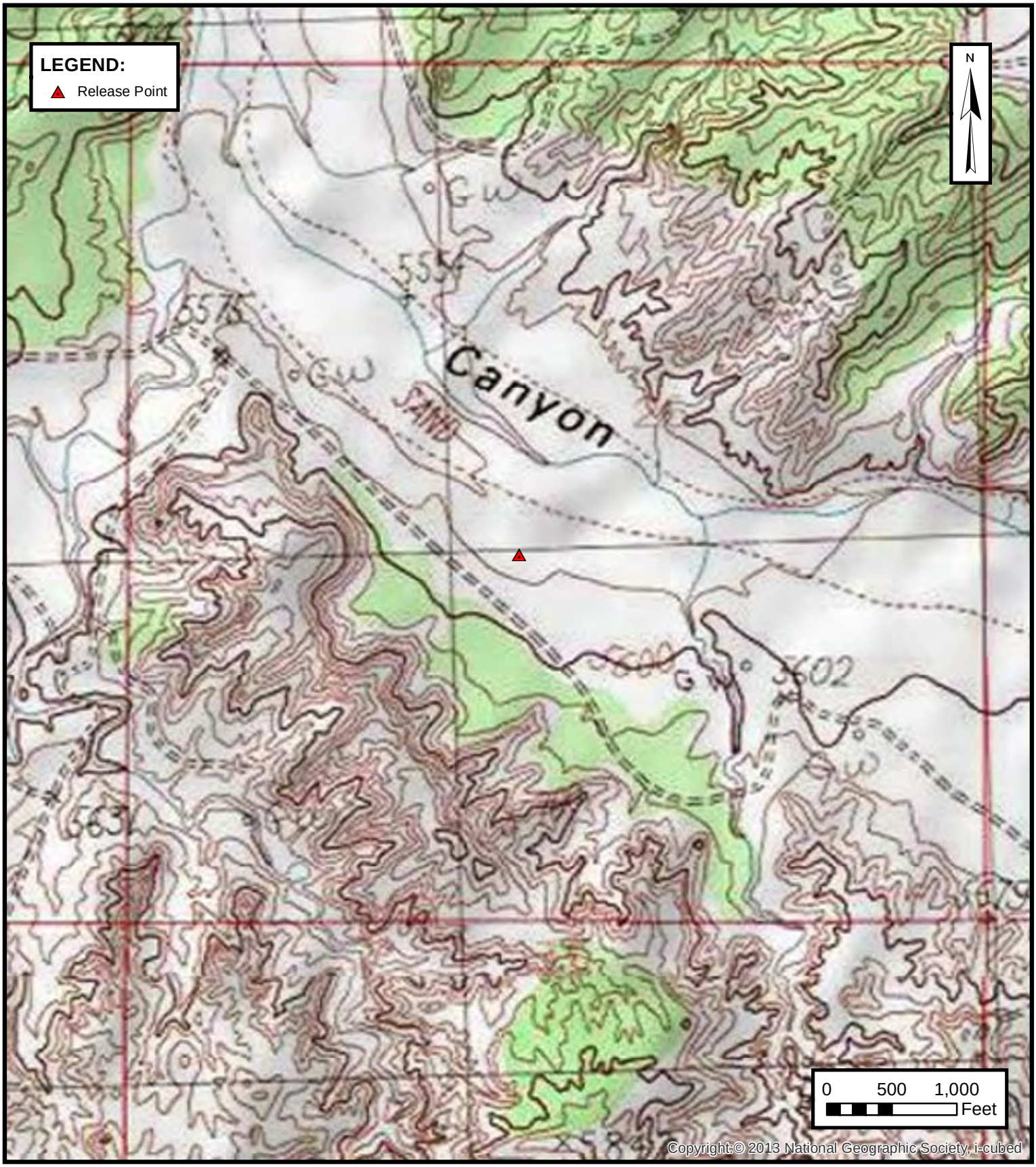
5.3 Reliance

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.

ENSOLUM

APPENDIX A

Figures



ENSOLUM
Environmental & Hydrogeologic Consultants

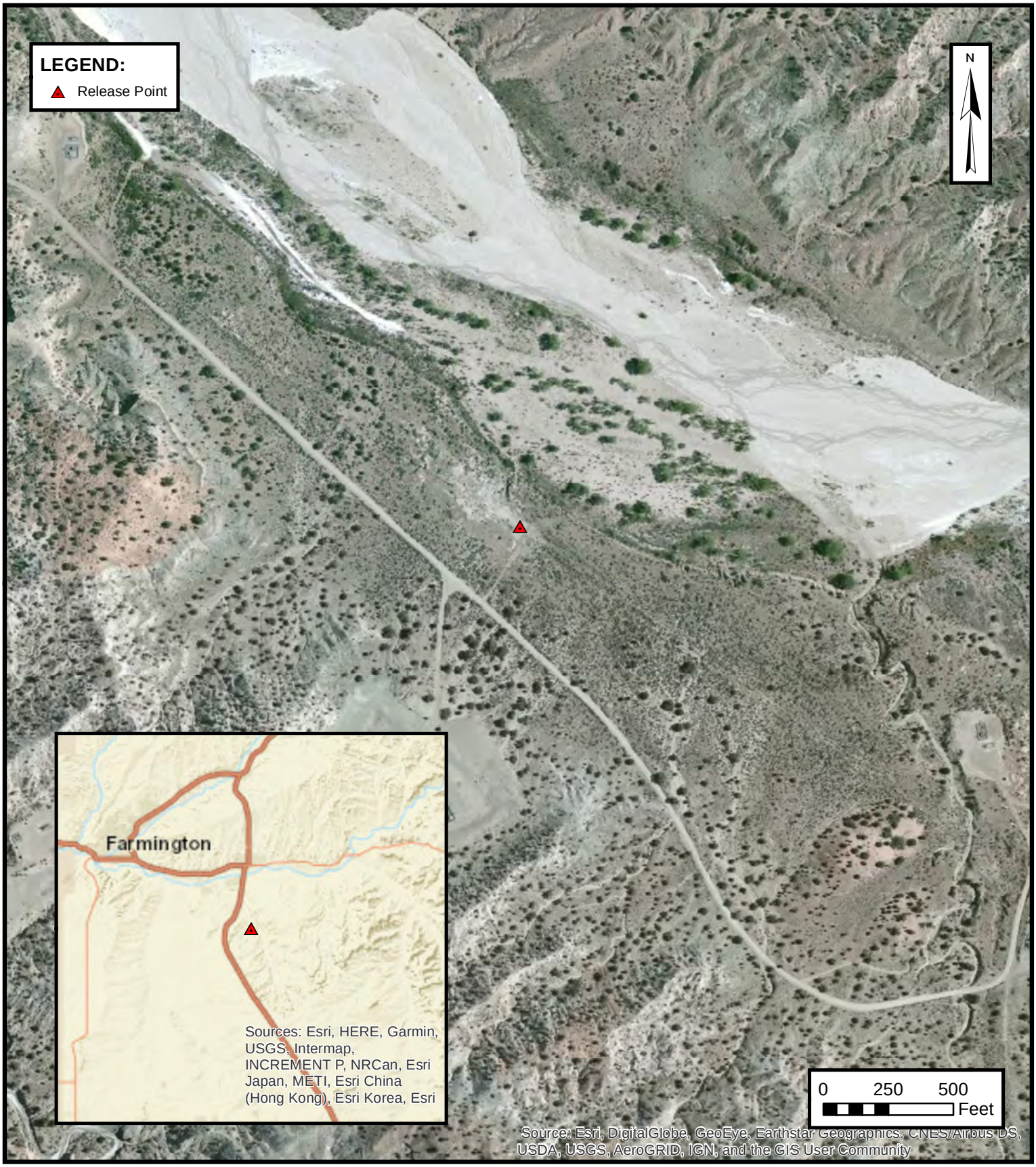
TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE

1



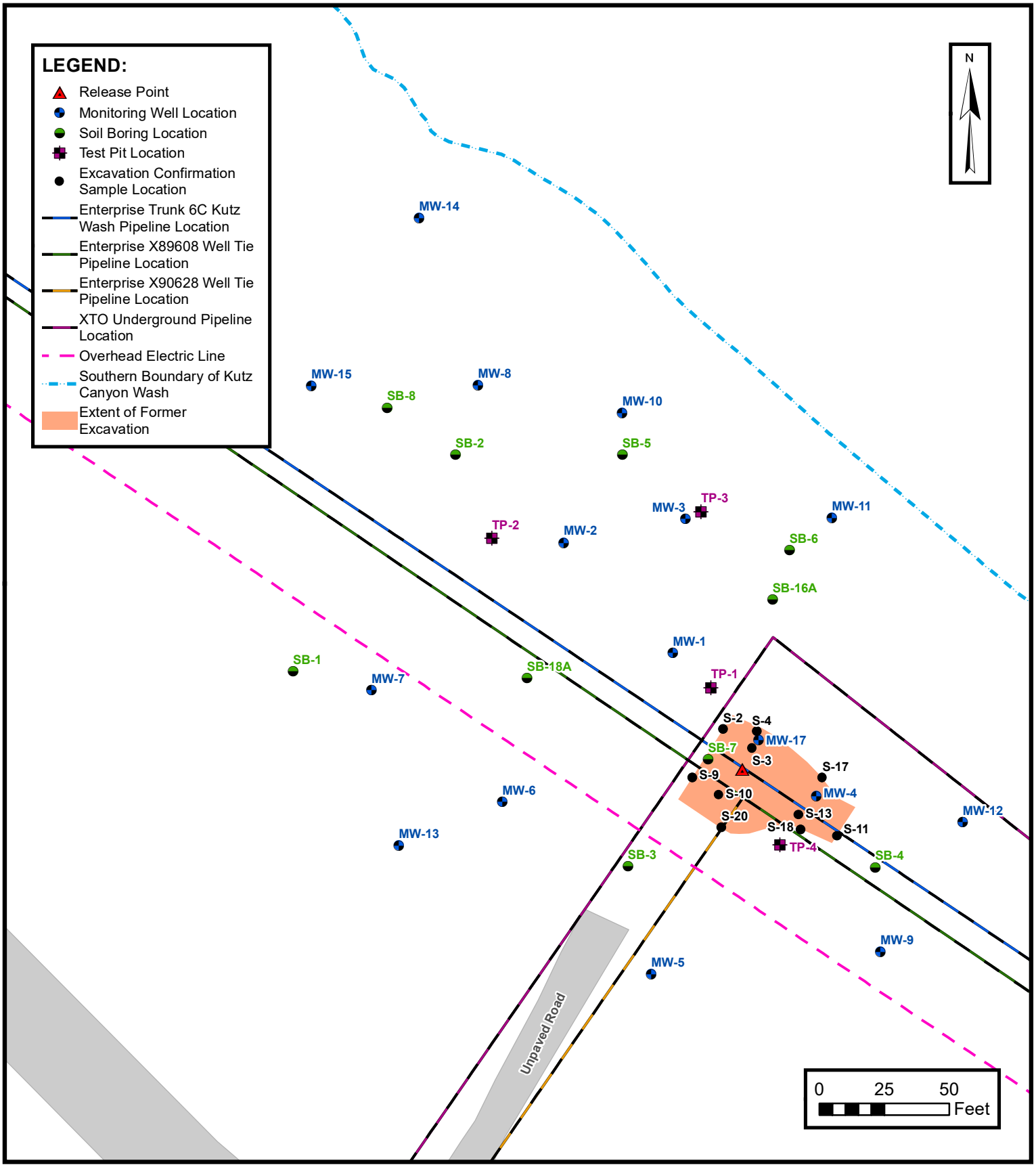
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
2



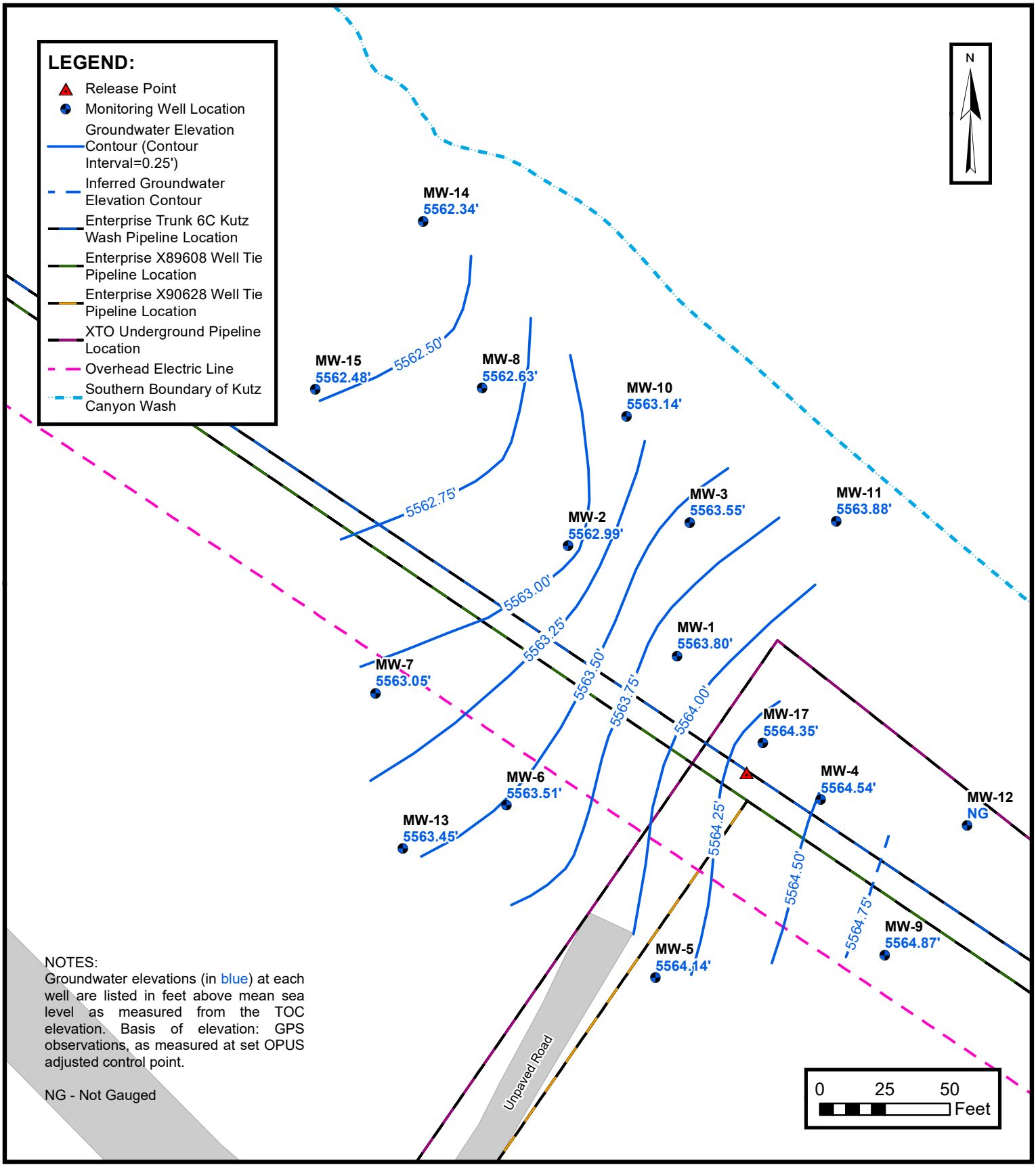
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE MAP

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
3



NOTES:
Groundwater elevations (in blue) at each well are listed in feet above mean sea level as measured from the TOC elevation. Basis of elevation: GPS observations, as measured at set OPUS adjusted control point.

NG - Not Gauged

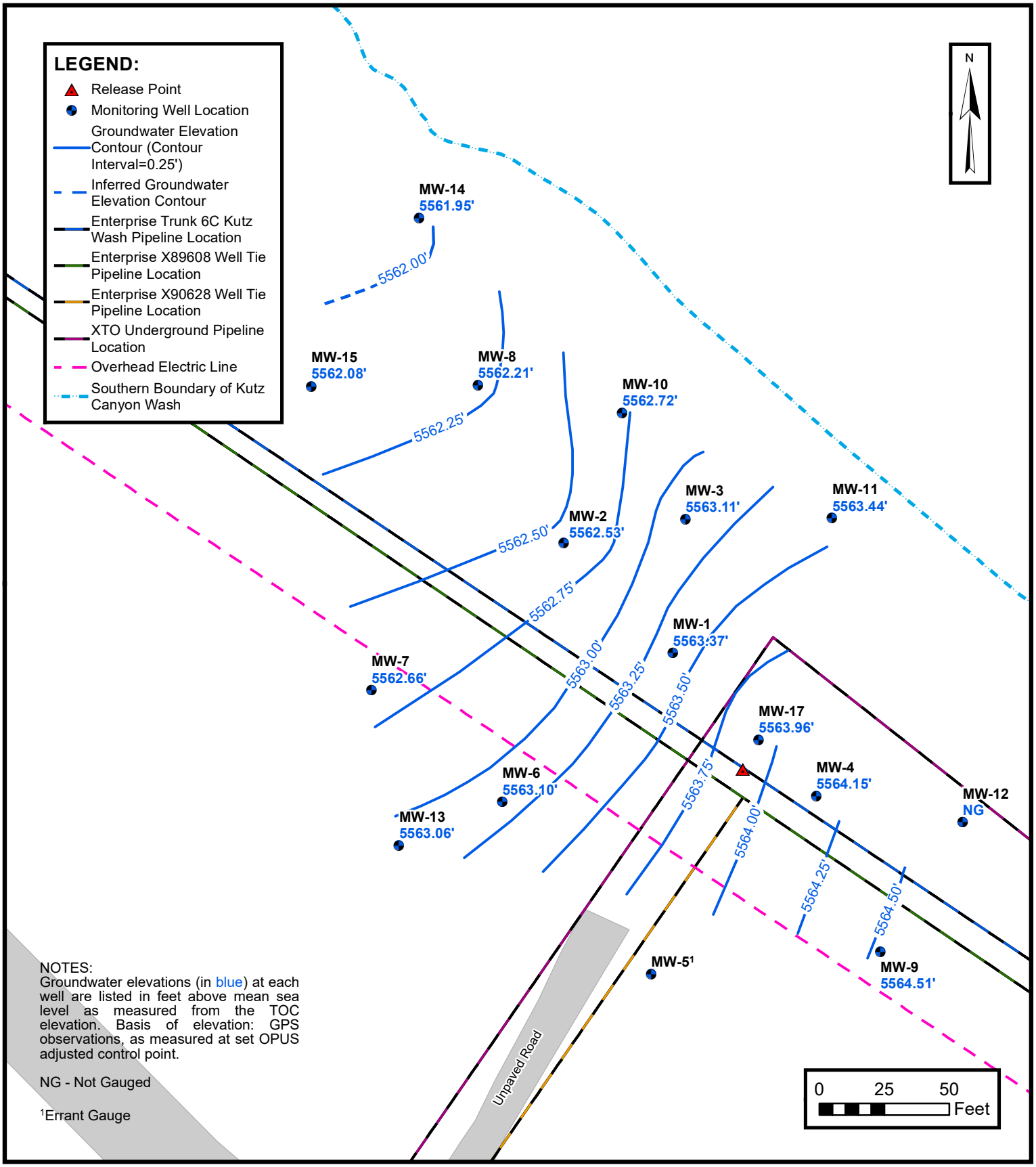
ENSOLUM
Environmental & Hydrogeologic Consultants

GROUNDWATER GRADIENT MAP JUNE 2020

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
4A



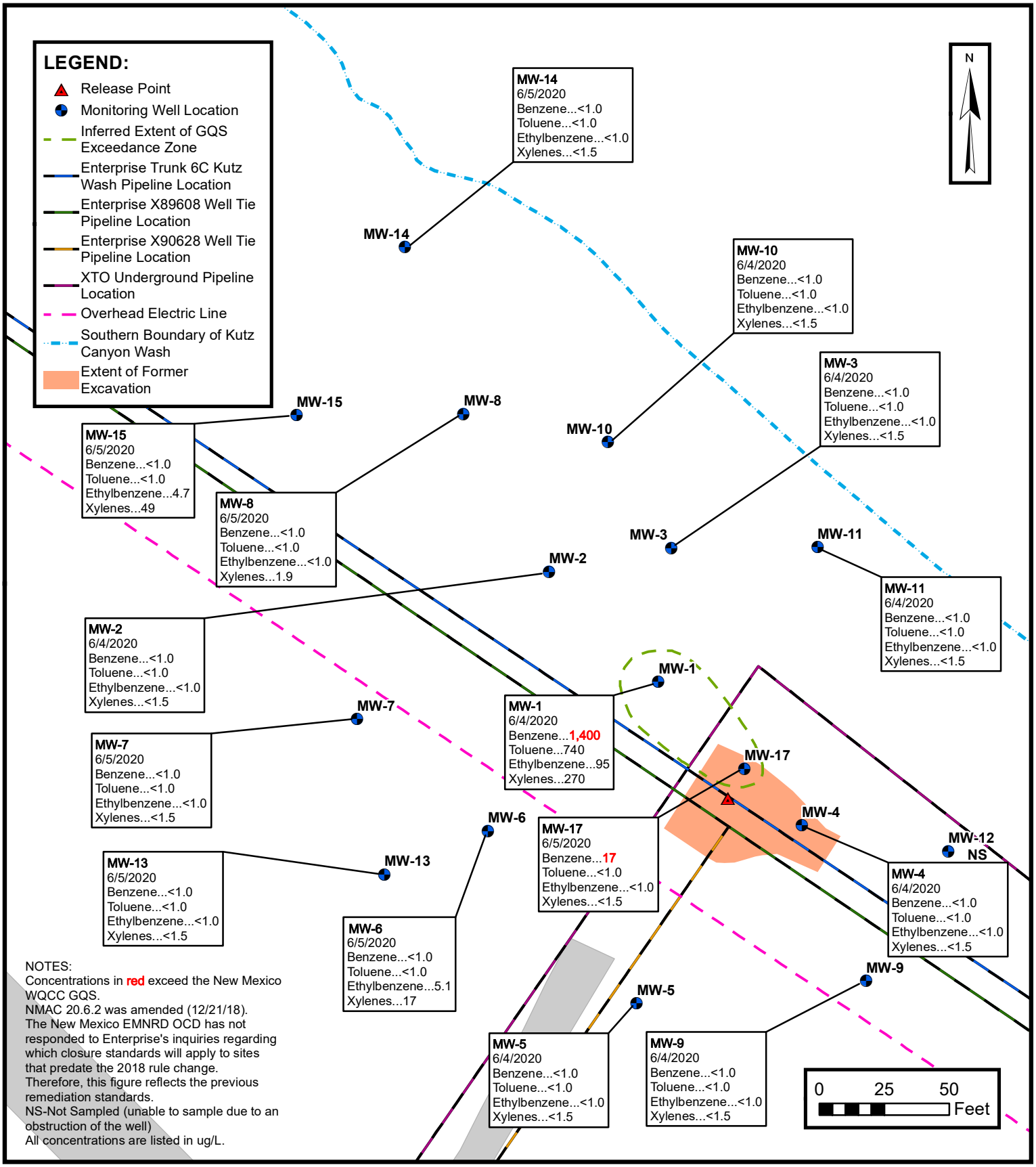
ENSOLUM
Environmental & Hydrogeologic Consultants

GROUNDWATER GRADIENT MAP NOVEMBER 2020

ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
4B

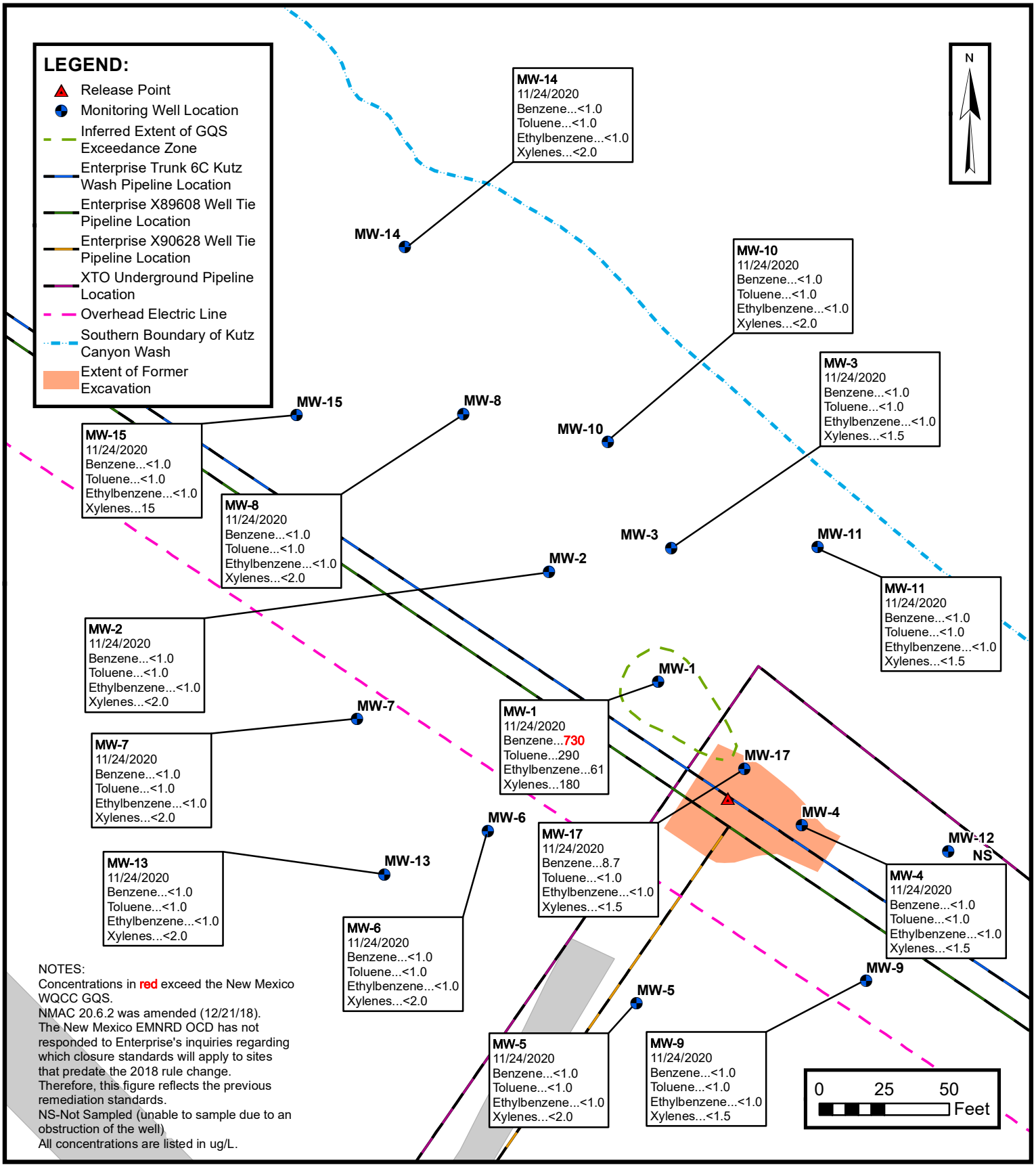


ENSOLUM
Environmental & Hydrogeologic Consultants

GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP JUNE 2020
ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
5A



ENSOLUM
Environmental & Hydrogeologic Consultants

GROUNDWATER QUALITY STANDARD (GQS) EXCEEDANCE ZONE MAP NOVEMBER 2020
ENTERPRISE FIELD SERVICES, LLC
TRUNK 6C KUTZ WASH
SW ¼, S26 T28N R11W, San Juan County, New Mexico
36.63202° N, 107.97400° W

PROJECT NUMBER: 05A1226011

FIGURE
5B

ENSOLUM

APPENDIX B

Tables

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TABLE 1
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]
MW-1	9.7.12	**2,200**	350	68	**650**
	12.20.12	**1,100**	250	37	180
	3.20.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	6.19.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	9.17.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	12.16.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	3.14.15	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	9.9.15	**1,900**	440	54	400
	6.15.15	**6,900**	**2,700**	170	**1,400**
	12.7.15	**3,900**	**1,400**	120	**870**
	6.02.16	**1,400**	**850**	41	330
	12.20.16	**76**	59	2.5	23
	6.28.17	**3,500**	**4,200**	180	**1,800**
	1.10.18	**1,300**	710	59	350
	6.22.18	**3,800**	**2,400**	140	**740**
	12.14.18	**590**	400	33	99
	8.21.19	**800**	510	46	150
	1.13.20	**940**	540	61	190
	6.4.20	**1,400**	740	95	270
	11.24.20	**730**	290	61	180
MW-2	9.7.12	**270**	**1,100**	66	**1,800**
	12.20.12	**26**	49	5.1	250
	3.20.13	<5.0	<5.0	<5.0	67
	6.19.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	9.17.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	12.16.13	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	3.14.14	**1,200**	**1,600**	74	**660**
	9.9.14	**78**	76	2.9	110
	6.15.15	<1.0	1.1	<1.0	44
	12.7.15	<1.0	<1.0	<1.0	13
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
	8.21.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.4.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<2.0
MW-3	9.7.12	<2.0	<2.0	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	**780**	130	2.5	15
	9.18.13	**150**	28	<5.0	15
	12.16.13	**660**	340	16	130
	3.14.14	**200**	86	4.0	49
	9.9.14	2.5	1.7	<1.0	3.3
	6.12.15	1.3	<1.0	<1.0	2.2
	12.7.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.28.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
	8.21.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.4.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<1.5

ENSOLUM

TABLE 1
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]
MW-4	9.7.12	**18**	5.1	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	**290**	110	<2.0	15
	6.19.13	**600**	45	<10	<20
	9.18.13	**830**	39	<20	<30
	12.16.13	**300**	110	10	63
	3.14.14	4.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.11.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.28.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0
	8.22.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.4.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<1.5
MW-5	9.7.12	<2.0	<2.0	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	<1.0	<1.0	<1.0	<2.0
	9.17.13	<1.0	<1.0	<1.0	<1.5
	12.16.13	2.1	4.7	4.0	17
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<1.0	<1.0	<1.0	<2.0
	6.12.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0
	8.22.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.4.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<2.0
MW-6	9.7.12	<5.0	<5.0	260	**2,200**
	12.20.12	<5.0	<5.0	180	**1,200**
	3.20.13	<5.0	<5.0	120	**800**
	6.19.13	9.6	6.2	150	**1,100**
	9.18.13	<5.0	<5.0	180	**1,200**
	12.16.13	<5.0	<5.0	140	**990**
	3.14.14	<1.0	<1.0	150	**990**
	9.9.14	<5.0	<5.0	49	400
	6.12.15	<5.0	<5.0	89	590
	12.4.15	<2.5	<5.0	41	210
	6.02.16	<1.0	<1.0	16	70
	12.19.16	<1.0	<1.0	26	80
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	3.6	12
	6.21.18	<1.0	<1.0	2.1	5.9
	12.13.18	<1.0	<1.0	2.7	9.8
	8.22.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.5.20	<1.0	<1.0	5.1	17
	11.24.20	<1.0	<1.0	<1.0	<2.0

ENSOLUM

TABLE 1
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]
MW-7	9.7.12	<2.0	<2.0	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	2.4
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	<1.0	<1.0	<1.0	<2.0
	9.17.13	<1.0	<1.0	<1.0	<1.5
	12.16.13	1.6	3.9	3.6	16
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<1.0	<1.0	<1.0	<2.0
	6.12.15	<1.0	<1.0	<1.0	<2.0
	12.7.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0
	8.21.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.5.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<2.0
MW-8	9.7.12	**41**	40	3.8	320
	12.20.12	<2.0	<2.0	<2.0	20
	3.20.13	**41**	36	<2.0	89
	6.19.13	**21**	12	<1.0	6.8
	9.18.13	<1.0	<1.0	3.4	27
	12.16.13	**18**	21	5.1	74
	3.14.14	**66**	190	10	210
	9.9.14	**NAPL****	**NAPL****	**NAPL****	**NAPL****
	6.15.15	<1.0	<1.0	<1.0	10
	12.7.15	1.3	<1.0	<1.0	53
	6.02.16	4.0	1.6	<1.0	5.1
	12.19.16	<1.0	<1.0	<1.0	2.1
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
	8.21.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.5.20	<1.0	<1.0	<1.0	1.9
	11.24.20	<1.0	<1.0	<1.0	<2.0
MW-9	9.7.12	<2.0	2.4	<2.0	<4.0
	12.20.12	<2.0	<2.0	<2.0	<4.0
	3.20.13	<2.0	<2.0	<2.0	<4.0
	6.19.13	<1.0	<1.0	<1.0	<2.0
	9.17.13	<1.0	<1.0	<1.0	<1.5
	12.16.13	1.5	3.5	2.9	12
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.11.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.02.16	<1.0	<1.0	<1.0	<2.0
	12.19.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.09.18	<1.0	<1.0	<1.0	<2.0
	6.21.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	<1.0	<1.0	<1.0	<2.0
	8.22.19	<1.0	<1.0	<1.0	<2.0
	1.10.20	<1.0	<1.0	<1.0	<2.0
	6.4.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<1.5

ENSOLUM

TABLE 1
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]
MW-10	12.16.13	**950**	34	12	39
	3.14.14	**560**	4.0	16	27
	9.9.14	**580**	<10	34	<20
	6.15.15	**75**	<1.0	12	2.9
	12.7.15	**17**	<1.0	2.0	<2.0
	6.03.16	**16**	<1.0	<1.0	<2.0
	12.20.16	4.8	<1.0	<1.0	<1.5
	6.27.17	3.4	<1.0	<1.0	<2.0
	1.10.18	<1.0	<1.0	<1.0	<2.0
	6.22.18	5.0	<1.0	<1.0	2.7
	12.14.18	<1.0	<1.0	<1.0	<2.0
	8.22.19	<1.0	<1.0	<1.0	<2.0
	1.13.20	<1.0	<1.0	<1.0	<2.0
	6.4.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<2.0
MW-11	12.16.13	2.6	3.5	<1.0	6
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.12.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.03.16	<1.0	<1.0	<1.0	<2.0
	12.20.16	<1.0	<1.0	<1.0	<1.5
	6.28.17	Insufficient volume of water to sample.			
	1.10.18	<1.0	<1.0	<1.0	<1.5
	6.22.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
	8.22.19	<1.0	<1.0	<1.0	<2.0
	1.14.20	<1.0	<1.0	<1.0	<2.0
	6.4.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<1.5
MW-12	12.16.13	3.3	3.8	<1.0	6
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.12.15	Casing Obstruction			
	12.4.15	Casing Obstruction			
	6.02.16	Casing Obstruction			
	12.20.16	Casing Obstruction			
	6.27.17	Casing Obstruction			
	1.10.18	Casing Obstruction			
	6.21.18	Casing Obstruction			
	12.13.18	Casing Obstruction			
	8.22.19	Casing Obstruction			
	1.10.20	Casing Obstruction			
	6.4.20	Casing Obstruction			
	11.24.20	Casing Obstruction			
MW-13	12.16.13	4.4	5.1	1.2	8
	3.14.14	<1.0	<1.0	<1.0	<3.0
	9.9.14	<2.0	<2.0	<2.0	<4.0
	6.15.15	<1.0	<1.0	<1.0	<2.0
	12.4.15	<1.0	<1.0	<1.0	<2.0
	6.03.16	<1.0	<1.0	<1.0	<2.0
	12.20.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.10.18	<1.0	<1.0	<1.0	<2.0
	6.22.18	<1.0	<1.0	<1.0	<1.5
	12.14.18	<1.0	<1.0	<1.0	<2.0
	8.22.19	<1.0	<1.0	<1.0	<2.0
	1.14.20	<1.0	<1.0	<1.0	<2.0
	6.5.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<2.0

ENSOLUM

TABLE 1
Trunk 6C Kutz Wash Pipeline Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]
MW-14	9.16.16	<1.0	<1.0	<1.0	<2.0
	12.20.16	<1.0	<1.0	<1.0	<1.5
	6.27.17	<1.0	<1.0	<1.0	<2.0
	1.10.18	<1.0	<1.0	<1.0	<2.0
	6.22.18	<1.0	<1.0	<1.0	<1.5
	12.13.18	2.7	<1.0	<1.0	6.1
	8.21.19	<1.0	<1.0	<1.0	<2.0
	1.13.20	<1.0	<1.0	<1.0	<2.0
	6.5.20	<1.0	<1.0	<1.0	<1.5
	11.24.20	<1.0	<1.0	<1.0	<2.0
MW-15	9.16.16	3.6	<1.0	4.1	43
	12.20.16	<1.0	<1.0	6.2	87
	6.27.17	4.1	<1.0	4.6	89
	1.10.18	4.7	<1.0	2.8	33
	6.21.18	6.5	<1.0	2.6	13
	12.13.18	1.2	<1.0	<1.0	<2.0
	8.21.19	<1.0	<1.0	<1.0	<2.0
	1.13.20	<1.0	<1.0	1.4	23
	6.5.20	<1.0	<1.0	4.7	49
	11.24.20	<1.0	<1.0	<1.0	15
MW-17	9.16.16	**380**	**790**	33	**1,200**
	12.20.16	**200**	100	11	310
	6.28.17	**130**	<5.0	<5.0	**950**
	1.10.18	5.2	2.2	1.2	13
	6.22.18	**29**	<1.0	2.4	<1.5
	12.14.18	**29**	<1.0	1.8	<2.0
	8.22.19	4.1	<1.0	<1.0	<2.0
	1.13.20	2.2	<1.0	<1.0	<2.0
	6.5.20	**17**	<1.0	<1.0	<1.5
	11.24.20	**8.7**	<1.0	<1.0	<1.5

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 previous remediation standards.

µg/L = micrograms per liter

NAPL = Non-aqueous phase liquid

** - Field personnel recorded the presence of NAPL utilizing an interface probe, but the product was not visually verified.

<1.0 = the numeral (in this case "1.0") identifies the laboratory RL or PQL

ENSOLUM

TABLE 2
Trunk 6C Kutz Wash Pipeline Release
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*	9.7.12	ND	15.78	ND	27.43	12.43-27.43	5579.73	5563.95
	12.20.12	ND	15.69	ND				5564.04
	3.20.13	15.31	15.73	0.42				5564.31
	6.19.13	15.49	15.75	0.26				5564.17
	9.17.13	15.79	16.27	0.48				5563.81
	12.16.13	15.59	15.75	0.16				5564.10
	3.14.14	15.35	15.36	0.01				5564.38
	9.9.14	15.98	15.99	0.01				5563.75
	6.10.15	15.29	15.30	0.01				5564.44
	12.04.15	ND	15.81	ND				5563.92
	6.02.16	ND	15.41	ND				5564.32
	9.16.16	16.12	16.13	0.01			5579.43	5563.31
	12.19.16	ND	15.83	ND				5563.60
	6.27.17	ND	15.39	ND				5564.04
	1.09.18	ND	15.61	ND				5563.82
	6.21.18	ND	15.65	ND				5563.78
	12.13.18	ND	15.89	ND				5563.54
	8.20.19	ND	16.02	ND				5563.41
	1.07.20	ND	15.79	ND				5563.64
	6.4.20	ND	15.63	ND				5563.80
	11.24.20	ND	16.06	ND				5563.37
MW-2*	9.7.12	ND	16.29	ND	25.62	10.62-25.62	5579.39	5563.10
	12.20.12	ND	16.22	ND				5563.17
	3.20.13	ND	15.97	ND				5563.42
	6.19.13	15.96	16.40	0.44				5563.31
	9.17.13	16.40	16.54	0.14				5562.95
	12.16.13	16.14	16.22	0.08				5563.23
	3.14.14	ND	15.89	ND				5563.50
	9.9.14	ND	16.50	ND				5562.89
	6.10.15	ND	15.81	ND				5563.58
	12.04.15	ND	16.32	ND				5563.07
	6.02.16	ND	15.93	ND				5563.46
	9.16.16	ND	16.61	ND			5579.15	5562.54
	12.19.16	ND	16.35	ND				5562.80
	6.27.17	ND	15.95	ND				5563.20
	1.09.18	ND	16.13	ND				5563.02
	6.21.18	ND	16.19	ND				5562.96
	12.13.18	ND	16.45	ND				5562.70
	8.20.19	ND	16.52	ND				5562.63
	1.07.20	ND	16.35	ND				5562.80
	6.4.20	ND	16.16	ND				5562.99
	11.24.20	ND	16.62	ND				5562.53
MW-3*	9.7.12	ND	15.98	ND	25.57	10.57-25.57	5579.52	5563.54
	12.20.12	ND	15.79	ND				5563.73
	3.20.13	ND	15.50	ND				5564.02
	6.19.13	ND	15.66	ND				5563.86
	9.18.13	ND	15.96	ND				5563.56
	12.16.13	ND	15.70	ND				5563.82
	3.14.14	ND	15.39	ND				5564.13
	9.9.14	ND	16.10	ND				5563.42
	6.10.15	ND	15.28	ND				5564.24
	12.04.15	ND	15.87	ND				5563.65
	6.02.16	ND	15.47	ND				5564.05
	9.16.16	ND	16.24	ND			5579.24	5563.00
	12.19.16	ND	15.87	ND				5563.37
	6.27.17	ND	15.45	ND				5563.79
	1.09.18	ND	15.65	ND				5563.59
	6.21.18	ND	15.76	ND				5563.48
	12.13.18	ND	15.97	ND				5563.27
	8.20.19	ND	16.14	ND				5563.10
	1.07.20	ND	15.85	ND				5563.39
	6.4.20	ND	15.69	ND				5563.55
	11.24.20	ND	16.13	ND				5563.11

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TABLE 2
Trunk 6C Kutz Wash Pipeline Release
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*	9.7.12	ND	15.59	ND	25.26	10.26-25.26	5580.36	5564.77
	12.20.12	ND	15.51	ND				5564.85
	3.20.13	ND	15.25	ND				5565.11
	6.19.13	ND	15.41	ND				5564.95
	9.18.13	ND	15.74	ND				5564.62
	12.16.13	ND	15.45	ND				5564.91
	3.14.14	ND	15.14	ND				5565.22
	9.9.14	ND	15.80	ND				5564.56
	6.10.15	ND	15.06	ND				5565.30
	12.04.15	ND	15.56	ND				5564.80
	6.02.16	ND	15.22	ND				5565.14
	9.16.16	ND	15.92	ND			5579.95	5564.03
	12.19.16	ND	15.55	ND				5564.40
	6.27.17	ND	15.22	ND				5564.73
	1.09.18	ND	15.34	ND				5564.61
	6.21.18	ND	15.45	ND				5564.50
	12.13.18	ND	15.60	ND				5564.35
	8.20.19	ND	15.80	ND				5564.15
	1.07.20	ND	15.50	ND				5564.45
	6.4.20	ND	15.41	ND				5564.54
	11.24.20	ND	15.80	ND				5564.15
MW-5*	9.7.12	ND	19.35	ND	25.58	10.58-25.58	5583.53	5564.18
	12.20.12	ND	19.28	ND				5564.25
	3.20.13	ND	19.10	ND				5564.43
	6.19.13	ND	19.21	ND				5564.32
	9.17.13	ND	19.55	ND				5563.98
	12.16.13	ND	19.28	ND				5564.25
	3.14.14	ND	19.03	ND				5564.50
	9.9.14	ND	19.58	ND				5563.95
	6.10.15	ND	18.98	ND				5564.55
	12.04.15	ND	19.41	ND				5564.12
	6.02.16	ND	19.08	ND				5564.45
	9.16.16	ND	19.69	ND			5583.41	5563.72
	12.19.16	ND	19.42	ND				5563.99
	6.27.17	ND	19.12	ND				5564.29
	1.09.18	ND	19.22	ND				5564.19
	6.21.18	ND	19.27	ND				5564.14
	12.13.18	ND	19.44	ND				5563.97
	8.20.19	ND	19.60	ND				5563.81
	1.07.20	ND	19.39	ND				5564.02
	6.4.20	ND	19.27	ND				5564.14
	11.24.20	ND	20.66[1]	ND				5562.75[1]
MW-6*	9.7.12	ND	18.55	ND	25.50	10.50-25.50	5582.22	5563.67
	12.20.12	ND	18.49	ND				5563.73
	3.20.13	ND	18.27	ND				5563.95
	6.19.13	ND	18.38	ND				5563.84
	9.18.13	ND	18.74	ND				5563.48
	12.16.13	ND	18.46	ND				5563.76
	3.14.14	ND	18.21	ND				5564.01
	9.9.14	ND	18.75	ND				5563.47
	6.10.15	ND	18.16	ND				5564.06
	12.04.15	ND	18.60	ND				5563.62
	6.02.16	ND	18.25	ND				5563.97
	9.16.16	ND	18.86	ND			5581.98	5563.12
	12.19.16	ND	18.61	ND				5563.37
	6.27.17	ND	18.29	ND				5563.69
	1.09.18	ND	18.43	ND				5563.55
	6.21.18	ND	18.47	ND				5563.51
	12.13.18	ND	18.70	ND				5563.28
	8.20.19	ND	18.79	ND				5563.19
	1.07.20	ND	18.61	ND				5563.37
	6.4.20	ND	18.47	ND				5563.51
	11.24.20	ND	18.88	ND				5563.10

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TABLE 2
Trunk 6C Kutz Wash Pipeline Release
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-7*	9.7.12	ND	19.03	ND	25.85	10.85-25.85	5582.24	5563.21
	12.20.12	ND	18.97	ND				5563.27
	3.20.13	ND	18.79	ND				5563.45
	6.19.13	ND	18.87	ND				5563.37
	9.17.13	ND	19.22	ND				5563.02
	12.16.13	ND	18.46	ND				5563.78
	3.14.14	ND	18.73	ND				5563.51
	9.9.14	ND	19.24	ND				5563.00
	6.10.15	ND	18.65	ND				5563.59
	12.04.15	ND	19.10	ND				5563.14
	6.02.16	ND	18.76	ND				5563.48
	9.16.16	ND	19.37	ND			5582.05	5562.68
	12.19.16	ND	19.13	ND				5562.92
	6.27.17	ND	18.80	ND				5563.25
	1.09.18	ND	18.95	ND				5563.10
	6.21.18	ND	18.98	ND				5563.07
	12.13.18	ND	19.22	ND				5562.83
	8.20.19	ND	19.31	ND				5562.74
	1.07.20	ND	19.14	ND				5562.91
	6.4.20	ND	19.00	ND				5563.05
	11.24.20	ND	19.39	ND				5562.66
MW-8*	9.7.12	ND	14.96	ND	24.78	9.78-24.78	5577.81	5562.85
	12.20.12	ND	14.87	ND				5562.94
	3.20.13	ND	14.63	ND				5563.18
	6.19.13	ND	14.74	ND				5563.07
	9.18.13	ND	15.08	ND				5562.73
	12.16.13	ND	14.81	ND				5563.00
	3.14.14	ND	14.53	ND				5563.28
	9.9.14**	15.12**	15.25	0.13**				5562.65
	6.10.15	ND	14.44	ND				5563.37
	12.04.15	ND	14.97	ND				5562.84
	6.02.16	ND	14.61	ND				5563.20
	9.16.16	ND	15.29	ND			5577.47	5562.18
	12.19.16	ND	15.00	ND				5562.47
	6.27.17	ND	14.62	ND				5562.85
	1.09.18	ND	14.80	ND				5562.67
	6.21.18	ND	14.88	ND				5562.59
	12.13.18	ND	15.11	ND				5562.36
	8.20.19	ND	15.22	ND				5562.25
	1.07.20	ND	15.00	ND				5562.47
	6.4.20	ND	14.84	ND				5562.63
	11.24.20	ND	15.26	ND				5562.21
MW-9*	9.7.12	ND	17.55	ND	25.78	10.78-25.78	5582.48	5564.93
	12.20.12	ND	17.47	ND				5565.01
	3.20.13	ND	17.28	ND				5565.20
	6.19.13	ND	17.42	ND				5565.06
	9.17.13	ND	17.74	ND				5564.74
	12.16.13	ND	17.48	ND				5565.00
	3.14.14	ND	17.21	ND				5565.27
	9.9.14	ND	17.83	ND				5564.65
	6.10.15	ND	17.18	ND				5565.30
	12.04.15	ND	17.61	ND				5564.87
	6.02.16	ND	17.30	ND				5565.18
	9.16.16	ND	17.94	ND			5582.35	5564.41
	12.19.16	ND	17.60	ND				5564.75
	6.27.17	ND	17.34	ND				5565.01
	1.09.18	ND	17.40	ND				5564.95
	6.21.18	ND	17.49	ND				5564.86
	12.13.18	ND	17.63	ND				5564.72
	8.20.19	ND	17.84	ND				5564.51
	1.07.20	ND	17.57	ND				5564.78
	6.4.20	ND	17.48	ND				5564.87
	11.24.20	ND	17.84	ND				5564.51

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TABLE 2
Trunk 6C Kutz Wash Pipeline Release
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-10*	12.16.13	ND	16.93	ND	21.36	11.36-21.36	5577.80	5560.87
	3.14.14	ND	14.63	ND				5563.17
	9.9.14	ND	15.34	ND				5562.46
	6.10.15	ND	14.58	ND				5563.22
	12.04.15	ND	15.10	ND				5562.70
	6.02.16	ND	14.74	ND				5563.06
	9.16.16	ND	15.49	ND			5578.10	5562.61
	12.19.16	ND	15.12	ND				5562.98
	6.27.17	ND	14.73	ND				5563.37
	1.09.18	ND	14.90	ND				5563.20
	6.21.18	ND	15.05	ND				5563.05
	12.13.18	ND	15.21	ND				5562.89
	8.20.19	ND	15.38	ND				5562.72
	1.07.20	ND	15.09	ND				5563.01
	6.4.20	ND	14.96	ND				5563.14
	11.24.20	ND	15.38	ND				5562.72
MW-11*	12.16.13	ND	15.15	ND	21.25	11.25-21.25	5578.65	5563.50
	3.14.14	ND	14.82	ND				5563.83
	9.9.14	ND	15.63	ND				5563.02
	6.10.15	ND	14.76	ND				5563.89
	12.04.15	ND	15.35	ND				5563.30
	6.02.16	ND	14.98	ND				5563.67
	9.16.16	ND	15.74	ND			5579.04	5563.30
	12.19.16	ND	15.35	ND				5563.69
	6.27.17	ND	15.00	ND				5564.04
	1.09.18	ND	15.11	ND				5563.93
	6.21.18	ND	15.28	ND				5563.76
	12.13.18	ND	15.45	ND				5563.59
	8.20.19	ND	15.66	ND				5563.38
	1.07.20	ND	15.32	ND				5563.72
	6.4.20	ND	15.16	ND				5563.88
	11.24.20	ND	15.60	ND				5563.44
MW-12*	12.16.13	ND	15.54	ND	21.36	11.36-21.36	5579.99	5564.45
	3.14.14	ND	15.27	ND				5564.72
	9.9.14	ND	15.96	ND				5564.03
	6.10.15	ND	15.22	ND				5564.77
	12.04.15	NG	NG	NG				NG
	6.02.16	NG	NG	NG				NG
	9.16.16	NG	NG	NG			5580.28	NG
	12.19.16	NG	NG	NG				NG
	6.27.17	NG	NG	NG				NG
	1.09.18	NG	NG	NG				NG
	6.21.18	NG	NG	NG				NG
	12.13.18	Plugged						NG
	8.20.19	Plugged						NG
	1.07.20	Plugged						NG
	6.4.20	Plugged						NG
	11.24.20	Plugged						NG
MW-13*	12.16.13	ND	19.88	ND	25.26	15.26-25.26	5583.03	5563.15
	3.14.14	ND	19.63	ND				5563.40
	9.9.14	ND	20.18	ND				5562.85
	6.10.15	ND	19.57	ND				5563.46
	12.04.15	ND	20.01	ND				5563.02
	6.02.16	ND	19.67	ND				5563.36
	9.16.16	ND	20.27	ND			5583.34	5563.07
	12.19.16	ND	20.03	ND				5563.31
	6.27.17	ND	19.74	ND				5563.60
	1.09.18	ND	19.85	ND				5563.49
	6.21.18	ND	19.89	ND				5563.45
	12.13.18	ND	20.13	ND				5563.21
	8.20.19	ND	20.22	ND				5563.12
	1.07.20	ND	20.02	ND				5563.32
	6.4.20	ND	19.89	ND				5563.45
	11.24.20	ND	20.28	ND				5563.06

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TABLE 2
Trunk 6C Kutz Wash Pipeline Release
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	9.16.16	ND	14.48	ND	23.01	13.01-23.01	5576.39	5561.91
	12.19.16	ND	14.18	ND				5562.21
	6.27.17	ND	13.83	ND				5562.56
	1.09.18	ND	13.99	ND				5562.40
	6.21.18	ND	14.10	ND				5562.29
	12.13.18	ND	14.33	ND				5562.06
	8.20.19	ND	14.43	ND				5561.96
	1.07.20	ND	14.21	ND				5562.18
	6.4.20	ND	14.05	ND				5562.34
	11.24.20	ND	14.44	ND				5561.95
MW-15	9.16.16	ND	16.75	ND	23.15	13.15-23.15	5578.83	5562.08
	12.19.16	ND	16.48	ND				5562.35
	6.27.17	ND	16.12	ND				5562.71
	1.09.18	ND	16.30	ND				5562.53
	6.21.18	ND	16.36	ND				5562.47
	12.13.18	ND	16.60	ND				5562.23
	8.20.19	ND	16.70	ND				5562.13
	1.07.20	ND	16.50	ND				5562.33
	6.4.20	ND	16.35	ND				5562.48
	11.24.20	ND	16.75	ND				5562.08
MW-17	9.16.16	ND	16.02	ND	22.95	12.95-22.95	5579.86	5563.84
	12.19.16	ND	15.68	ND				5564.18
	6.27.17	ND	15.30	ND				5564.56
	1.09.18	ND	15.45	ND				5564.41
	6.21.18	ND	15.55	ND				5564.31
	12.13.18	ND	15.72	ND				5564.14
	8.20.19	ND	15.91	ND				5563.95
	1.07.20	ND	15.62	ND				5564.24
	6.4.20	ND	15.51	ND				5564.35
	11.24.20	ND	15.90	ND				5563.96

BTOC - below top of casing

AMSL - above mean sea level

TOC - top of casing

NG - Well not gauged, or Errant Gauge.

* - Monitoring wells resurveyed during September 2016. Groundwater elevations at each well are listed in feet above mean sea level as measured from the TOC elevation. Basis of elevation: GPS observations, as measured at set OPUS adjusted control point.

** - Field personnel recorded the presence of NAPL utilizing an interface probe, but the product was not visually verified.

NA - not applicable

[1] - Errant Gauge

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APPENDIX C

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 10, 2020

Kyle Summers

ENSOLUM
606 S Rio Grande Ste A
Aztec, NM 87410
TEL:
FAX:

RE: Trunk 6C OrderNo.: 2006317

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 6/5/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order: **2006317**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2006317
Project: Trunk 6C

Lab ID: 2006317-001 **Collection Date:** 6/4/2020 8:30:00 AM
Client Sample ID: MW-5 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/8/2020 9:22:15 PM	R69486
Toluene	ND	1.0		µg/L	1	6/8/2020 9:22:15 PM	R69486
Ethylbenzene	ND	1.0		µg/L	1	6/8/2020 9:22:15 PM	R69486
Xylenes, Total	ND	1.5		µg/L	1	6/8/2020 9:22:15 PM	R69486
Surr: 1,2-Dichloroethane-d4	86.7	70-130		%Rec	1	6/8/2020 9:22:15 PM	R69486
Surr: Dibromofluoromethane	98.6	70-130		%Rec	1	6/8/2020 9:22:15 PM	R69486
Surr: Toluene-d8	102	70-130		%Rec	1	6/8/2020 9:22:15 PM	R69486

Lab ID: 2006317-002 **Collection Date:** 6/4/2020 9:15:00 AM
Client Sample ID: MW-9 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/8/2020 9:50:40 PM	R69486
Toluene	ND	1.0		µg/L	1	6/8/2020 9:50:40 PM	R69486
Ethylbenzene	ND	1.0		µg/L	1	6/8/2020 9:50:40 PM	R69486
Xylenes, Total	ND	1.5		µg/L	1	6/8/2020 9:50:40 PM	R69486
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	6/8/2020 9:50:40 PM	R69486
Surr: Dibromofluoromethane	105	70-130		%Rec	1	6/8/2020 9:50:40 PM	R69486
Surr: Toluene-d8	102	70-130		%Rec	1	6/8/2020 9:50:40 PM	R69486

Lab ID: 2006317-003 **Collection Date:** 6/4/2020 9:50:00 AM
Client Sample ID: MW-4 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/8/2020 10:19:11 PM	R69486
Toluene	ND	1.0		µg/L	1	6/8/2020 10:19:11 PM	R69486
Ethylbenzene	ND	1.0		µg/L	1	6/8/2020 10:19:11 PM	R69486
Xylenes, Total	ND	1.5		µg/L	1	6/8/2020 10:19:11 PM	R69486
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	6/8/2020 10:19:11 PM	R69486
Surr: Dibromofluoromethane	94.8	70-130		%Rec	1	6/8/2020 10:19:11 PM	R69486
Surr: Toluene-d8	93.3	70-130		%Rec	1	6/8/2020 10:19:11 PM	R69486

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order: **2006317**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2006317
Project: Trunk 6C

Lab ID: 2006317-004 **Collection Date:** 6/4/2020 10:35:00 AM
Client Sample ID: MW-3 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/8/2020 10:47:47 PM	R69486
Toluene	ND	1.0		µg/L	1	6/8/2020 10:47:47 PM	R69486
Ethylbenzene	ND	1.0		µg/L	1	6/8/2020 10:47:47 PM	R69486
Xylenes, Total	ND	1.5		µg/L	1	6/8/2020 10:47:47 PM	R69486
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	6/8/2020 10:47:47 PM	R69486
Surr: Dibromofluoromethane	99.7	70-130		%Rec	1	6/8/2020 10:47:47 PM	R69486
Surr: Toluene-d8	90.9	70-130		%Rec	1	6/8/2020 10:47:47 PM	R69486

Lab ID: 2006317-005 **Collection Date:** 6/4/2020 11:10:00 AM
Client Sample ID: MW-10 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 1:10:33 AM	R69486
Toluene	ND	1.0		µg/L	1	6/9/2020 1:10:33 AM	R69486
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 1:10:33 AM	R69486
Xylenes, Total	ND	1.5		µg/L	1	6/9/2020 1:10:33 AM	R69486
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%Rec	1	6/9/2020 1:10:33 AM	R69486
Surr: Dibromofluoromethane	100	70-130		%Rec	1	6/9/2020 1:10:33 AM	R69486
Surr: Toluene-d8	95.6	70-130		%Rec	1	6/9/2020 1:10:33 AM	R69486

Lab ID: 2006317-006 **Collection Date:** 6/4/2020 11:50:00 AM
Client Sample ID: MW-2 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 1:39:03 AM	R69486
Toluene	ND	1.0		µg/L	1	6/9/2020 1:39:03 AM	R69486
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 1:39:03 AM	R69486
Xylenes, Total	ND	1.5		µg/L	1	6/9/2020 1:39:03 AM	R69486
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	6/9/2020 1:39:03 AM	R69486
Surr: Dibromofluoromethane	106	70-130		%Rec	1	6/9/2020 1:39:03 AM	R69486
Surr: Toluene-d8	101	70-130		%Rec	1	6/9/2020 1:39:03 AM	R69486

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order: **2006317**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2006317
Project: Trunk 6C

Lab ID: 2006317-007 **Collection Date:** 6/4/2020 11:50:00 AM
Client Sample ID: MW-11 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 2:07:32 AM	W6948
Toluene	ND	1.0		µg/L	1	6/9/2020 2:07:32 AM	W6948
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 2:07:32 AM	W6948
Xylenes, Total	ND	1.5		µg/L	1	6/9/2020 2:07:32 AM	W6948
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	6/9/2020 2:07:32 AM	W6948
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	6/9/2020 2:07:32 AM	W6948
Surr: Toluene-d8	91.3	70-130		%Rec	1	6/9/2020 2:07:32 AM	W6948

Lab ID: 2006317-008 **Collection Date:** 6/4/2020 12:35:00 PM
Client Sample ID: MW-1 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	1400	20		µg/L	20	6/9/2020 3:32:55 AM	W6948
Toluene	740	20		µg/L	20	6/9/2020 3:32:55 AM	W6948
Ethylbenzene	95	20		µg/L	20	6/9/2020 3:32:55 AM	W6948
Xylenes, Total	270	30		µg/L	20	6/9/2020 3:32:55 AM	W6948
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%Rec	20	6/9/2020 3:32:55 AM	W6948
Surr: Dibromofluoromethane	99.8	70-130		%Rec	20	6/9/2020 3:32:55 AM	W6948
Surr: Toluene-d8	89.1	70-130		%Rec	20	6/9/2020 3:32:55 AM	W6948

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006317**

10-Jun-20

Client: ENSOLUM

Project: Trunk 6C

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R69486**	RunNo: **69486**
Prep Date:	Analysis Date: **6/8/2020**	SeqNo: **2411386** 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	9.7		10.00		96.6	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.6	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.4		10.00		93.6	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R69486**	RunNo: **69486**
Prep Date:	Analysis Date: **6/8/2020**	SeqNo: **2411387** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	70	130			
Toluene	19	1.0	20.00	0	94.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.1	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.2	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID: **mb2**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **W69486**	RunNo: **69486**
Prep Date:	Analysis Date: **6/9/2020**	SeqNo: **2411394** 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	9.1		10.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.8	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.0		10.00		90.4	70	130			

Sample ID: **100ng lcs2**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **W69486**	RunNo: **69486**
Prep Date:	Analysis Date: **6/9/2020**	SeqNo: **2411395** Units: **µg/L**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006317**

10-Jun-20

Client: ENSOLUM

Project: Trunk 6C

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **LCSW** Batch ID: **W69486** RunNo: **69486**

Prep Date: Analysis Date: **6/9/2020** SeqNo: **2411395** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.5	70	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

Sample ID: **2006317-007ams** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-11** Batch ID: **W69486** RunNo: **69486**

Prep Date: Analysis Date: **6/9/2020** SeqNo: **2411397** 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	104	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.4	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.7	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.0	70	130			
Surr: Toluene-d8	9.6		10.00		96.0	70	130			

Sample ID: **2006317-007amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-11** Batch ID: **W69486** RunNo: **69486**

Prep Date: Analysis Date: **6/9/2020** SeqNo: **2411398** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130	4.14	20	
Toluene	19	1.0	20.00	0	94.2	70	130	9.53	20	
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.2		10.00		92.0	70	130	0	0	
Surr: Dibromofluoromethane	9.4		10.00		94.1	70	130	0	0	
Surr: Toluene-d8	8.8		10.00		88.4	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 AZTEC** Work Order Number: **2006317** RcptNo: **1**

Received By: **Desiree Dominguez** **6/5/2020 8:30:00 AM** DD

Completed By: **Desiree Dominguez** **6/5/2020 10:44:00 AM** DD

Reviewed By: JR 6/5/20

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° 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: DAD 6/5/20

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	1.4	Good	Yes			

Chain-of-Custody Record

Client: Ensolum

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

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: Trunk 6C

Project #: 05A122601l

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.4 +0.0 = 1.4°c

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006317	BTEX / ~~MTBE~~ / ~~TMBs~~ (8021)	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)
6/4/20	8:30	W	MW-5	3x40mL VOA	$HgCl_2$	-001	X									
6/4/20	9:15	W	MW-9	3x40mL VOA	$HgCl_2$	-002	X									
6/4/20	9:50	W	MW-4	3x40mL VOA	$HgCl_2$	-003	X									
6/4/20	10:35	W	MW-3	3x40mL VOA	$HgCl_2$	-004	X									
6/4/20	11:10	W	MW-10	3x40mL VOA	$HgCl_2$	-005	X									
6/4/20	11:50	W	MW-2	3x40mL VOA	$HgCl_2$	-006	X									
6/4/20	11:50	W	MW-11	3x40mL VOA	$HgCl_2$	-007	X									
6/4/20	12:35	W	MW-1	3x40mL VOA	$HgCl_2$	-008	X									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6/4/20	1635		Christen Waller		6/4/2020	1635
6/4/2020	1813	Christen Waller		courier	6/5/20	8:30

Remarks:
PM Kyle Summers
Bill to Ensolum

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 10, 2020

Kyle Summers

ENSOLUM
606 S Rio Grande Ste A
Aztec, NM 87410
TEL:
FAX:

RE: Trunk 6C OrderNo.: 2006373

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 7 sample(s) on 6/6/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2006373**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-8
Project: Trunk 6C **Collection Date:** 6/5/2020 8:05:00 AM
Lab ID: 2006373-001 **Matrix:** AQUEOUS **Received Date:** 6/6/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 4:01:22 AM	W69486
Toluene	ND	1.0		µg/L	1	6/9/2020 4:01:22 AM	W69486
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 4:01:22 AM	W69486
Xylenes, Total	1.9	1.5		µg/L	1	6/9/2020 4:01:22 AM	W69486
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	6/9/2020 4:01:22 AM	W69486
Surr: 4-Bromofluorobenzene	89.3	70-130		%Rec	1	6/9/2020 4:01:22 AM	W69486
Surr: Dibromofluoromethane	107	70-130		%Rec	1	6/9/2020 4:01:22 AM	W69486
Surr: Toluene-d8	95.0	70-130		%Rec	1	6/9/2020 4:01:22 AM	W69486

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006373**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-14
Project: Trunk 6C **Collection Date:** 6/5/2020 8:55:00 AM
Lab ID: 2006373-002 **Matrix:** AQUEOUS **Received Date:** 6/6/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 4:29:48 AM	W69486
Toluene	ND	1.0		µg/L	1	6/9/2020 4:29:48 AM	W69486
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 4:29:48 AM	W69486
Xylenes, Total	ND	1.5		µg/L	1	6/9/2020 4:29:48 AM	W69486
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	6/9/2020 4:29:48 AM	W69486
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	6/9/2020 4:29:48 AM	W69486
Surr: Dibromofluoromethane	107	70-130		%Rec	1	6/9/2020 4:29:48 AM	W69486
Surr: Toluene-d8	99.2	70-130		%Rec	1	6/9/2020 4:29:48 AM	W69486

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006373**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-15
Project: Trunk 6C **Collection Date:** 6/5/2020 9:35:00 AM
Lab ID: 2006373-003 **Matrix:** AQUEOUS **Received Date:** 6/6/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 4:58:13 AM	W69486
Toluene	ND	1.0		µg/L	1	6/9/2020 4:58:13 AM	W69486
Ethylbenzene	4.7	1.0		µg/L	1	6/9/2020 4:58:13 AM	W69486
Xylenes, Total	49	1.5		µg/L	1	6/9/2020 4:58:13 AM	W69486
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%Rec	1	6/9/2020 4:58:13 AM	W69486
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	6/9/2020 4:58:13 AM	W69486
Surr: Dibromofluoromethane	96.4	70-130		%Rec	1	6/9/2020 4:58:13 AM	W69486
Surr: Toluene-d8	91.3	70-130		%Rec	1	6/9/2020 4:58:13 AM	W69486

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2006373**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-7
Project: Trunk 6C **Collection Date:** 6/5/2020 10:20:00 AM
Lab ID: 2006373-004 **Matrix:** AQUEOUS **Received Date:** 6/6/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 5:26:36 AM	W69486
Toluene	ND	1.0		µg/L	1	6/9/2020 5:26:36 AM	W69486
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 5:26:36 AM	W69486
Xylenes, Total	ND	1.5		µg/L	1	6/9/2020 5:26:36 AM	W69486
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	6/9/2020 5:26:36 AM	W69486
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	6/9/2020 5:26:36 AM	W69486
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	6/9/2020 5:26:36 AM	W69486
Surr: Toluene-d8	88.7	70-130		%Rec	1	6/9/2020 5:26:36 AM	W69486

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006373**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-13
Project: Trunk 6C **Collection Date:** 6/5/2020 10:25:00 AM
Lab ID: 2006373-005 **Matrix:** AQUEOUS **Received Date:** 6/6/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 5:54:58 AM	W69486
Toluene	ND	1.0		µg/L	1	6/9/2020 5:54:58 AM	W69486
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 5:54:58 AM	W69486
Xylenes, Total	ND	1.5		µg/L	1	6/9/2020 5:54:58 AM	W69486
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	1	6/9/2020 5:54:58 AM	W69486
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	6/9/2020 5:54:58 AM	W69486
Surr: Dibromofluoromethane	98.5	70-130		%Rec	1	6/9/2020 5:54:58 AM	W69486
Surr: Toluene-d8	94.2	70-130		%Rec	1	6/9/2020 5:54:58 AM	W69486

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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2006373**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-6
Project: Trunk 6C **Collection Date:** 6/5/2020 11:25:00 AM
Lab ID: 2006373-006 **Matrix:** AQUEOUS **Received Date:** 6/6/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	6/9/2020 6:23:19 AM	W69486
Toluene	ND	1.0		µg/L	1	6/9/2020 6:23:19 AM	W69486
Ethylbenzene	5.1	1.0		µg/L	1	6/9/2020 6:23:19 AM	W69486
Xylenes, Total	17	1.5		µg/L	1	6/9/2020 6:23:19 AM	W69486
Surr: 1,2-Dichloroethane-d4	98.9	70-130		%Rec	1	6/9/2020 6:23:19 AM	W69486
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	6/9/2020 6:23:19 AM	W69486
Surr: Dibromofluoromethane	96.7	70-130		%Rec	1	6/9/2020 6:23:19 AM	W69486
Surr: Toluene-d8	98.1	70-130		%Rec	1	6/9/2020 6:23:19 AM	W69486

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006373**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-17
Project: Trunk 6C **Collection Date:** 6/5/2020 12:20:00 PM
Lab ID: 2006373-007 **Matrix:** AQUEOUS **Received Date:** 6/6/2020 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	17	1.0		µg/L	1	6/9/2020 6:51:41 AM	W69486
Toluene	ND	1.0		µg/L	1	6/9/2020 6:51:41 AM	W69486
Ethylbenzene	ND	1.0		µg/L	1	6/9/2020 6:51:41 AM	W69486
Xylenes, Total	ND	1.5		µg/L	1	6/9/2020 6:51:41 AM	W69486
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%Rec	1	6/9/2020 6:51:41 AM	W69486
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	6/9/2020 6:51:41 AM	W69486
Surr: Dibromofluoromethane	98.4	70-130		%Rec	1	6/9/2020 6:51:41 AM	W69486
Surr: Toluene-d8	89.1	70-130		%Rec	1	6/9/2020 6:51:41 AM	W69486

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006373**

10-Jun-20

Client: ENSOLUM

Project: Trunk 6C

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **PBW** Batch ID: **W69486** RunNo: **69486**

Prep Date: Analysis Date: **6/9/2020** SeqNo: **2411394** 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	9.1		10.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.8	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.0		10.00		90.4	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **LCSW** Batch ID: **W69486** RunNo: **69486**

Prep Date: Analysis Date: **6/9/2020** SeqNo: **2411395** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.5	70	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
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

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 AZTEC** Work Order Number: **2006373** RcptNo: 1

Received By: **Desiree Dominguez** **6/6/2020 9:00:00 AM** DD

Completed By: **Desiree Dominguez** **6/6/2020 10:57:13 AM** DD

Reviewed By: 6/8/20

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° 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 6.8.20

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	3.7	Good	Not Present			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A

Aztec, NM 87410

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: ~~05A1226~~ Trunk 6C

Project #: 05A1226011

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.5+0.2=3.7°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006373	BTEX / ~~MTBE / TMBs~~ (8021)	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)
6/5/20	8:05	W	MW-8	~~3~~ 3x40mL VOA	$HgCl_2$	-001	X									
6/5/20	8:55	W	MW-14	3x40mL VOA	$HgCl_2$	-002	X									
6/5/20	9:35	W	MW-15	3x40mL VOA	$HgCl_2$	-003	X									
6/5/20	10:20	W	MW-7	3x40mL VOA	$HgCl_2$	-004	X									
6/5/20	10:25	W	MW-13	3x40mL VOA	$HgCl_2$	-005	X									
6/5/20	11:25	W	MW-6	3x40mL VOA	$HgCl_2$	-006	X									
6/5/20	12:20	W	MW-17	3x40mL VOA	$HgCl_2$	-007	X									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6/5/20	1622			Walk	6/5/2020	1622
6/5/2020	1821			courier	6/6/20	9:00

Remarks:

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.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 03, 2020

Kyle Summers

ENSOLUM
606 S Rio Grande Ste A
Aztec, NM 87410
TEL:
FAX:

RE: Trunk 6C Kutz Wash OrderNo.: 2011C71

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 15 sample(s) on 11/25/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 10:10:00 AM
Lab ID: 2011C71-001 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 4:32:21 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 4:32:21 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 4:32:21 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 4:32:21 PM	B73678
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	11/30/2020 4:32:21 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-6
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 10:50:00 AM
Lab ID: 2011C71-002 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 4:55:50 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 4:55:50 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 4:55:50 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 4:55:50 PM	B73678
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	1	11/30/2020 4:55:50 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-7
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 11:20:00 AM
Lab ID: 2011C71-003 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 5:19:20 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 5:19:20 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 5:19:20 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 5:19:20 PM	B73678
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	11/30/2020 5:19:20 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-13
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 11:30:00 AM
Lab ID: 2011C71-004 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 5:42:50 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 5:42:50 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 5:42:50 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 5:42:50 PM	B73678
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	11/30/2020 5:42:50 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-15
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 12:35:00 PM
Lab ID: 2011C71-005 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 6:06:12 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 6:06:12 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 6:06:12 PM	B73678
Xylenes, Total	15	2.0		µg/L	1	11/30/2020 6:06:12 PM	B73678
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	11/30/2020 6:06:12 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-14
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 1:05:00 PM
Lab ID: 2011C71-006 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 6:29:39 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 6:29:39 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 6:29:39 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 6:29:39 PM	B73678
Surr: 4-Bromofluorobenzene	98.5	80-120		%Rec	1	11/30/2020 6:29:39 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-8
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 1:30:00 PM
Lab ID: 2011C71-007 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 6:53:05 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 6:53:05 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 6:53:05 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 6:53:05 PM	B73678
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/30/2020 6:53:05 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-2
Project: Trunk 6C Kutz Wash
Collection Date: 11/24/2020 2:05:00 PM
Lab ID: 2011C71-008
Matrix: AQUEOUS
Received Date: 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 7:16:38 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 7:16:38 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 7:16:38 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 7:16:38 PM	B73678
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	11/30/2020 7:16:38 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-10
Project: Trunk 6C Kutz Wash
Collection Date: 11/24/2020 2:10:00 PM
Lab ID: 2011C71-009
Matrix: AQUEOUS
Received Date: 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 7:40:07 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 7:40:07 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 7:40:07 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 7:40:07 PM	B73678
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	11/30/2020 7:40:07 PM	B73678

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 2:40:00 PM
Lab ID: 2011C71-010 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 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	12/1/2020 1:12:00 AM	B73664
Toluene	ND	1.0		µg/L	1	12/1/2020 1:12:00 AM	B73664
Ethylbenzene	ND	1.0		µg/L	1	12/1/2020 1:12:00 AM	B73664
Xylenes, Total	ND	1.5		µg/L	1	12/1/2020 1:12:00 AM	B73664
Surr: 1,2-Dichloroethane-d4	88.4	70-130		%Rec	1	12/1/2020 1:12:00 AM	B73664
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	12/1/2020 1:12:00 AM	B73664
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	12/1/2020 1:12:00 AM	B73664
Surr: Toluene-d8	93.5	70-130		%Rec	1	12/1/2020 1:12:00 AM	B73664

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-11
Project: Trunk 6C Kutz Wash
Collection Date: 11/24/2020 2:45:00 PM
Lab ID: 2011C71-011 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 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	12/1/2020 2:21:00 AM	B73664
Toluene	ND	1.0		µg/L	1	12/1/2020 2:21:00 AM	B73664
Ethylbenzene	ND	1.0		µg/L	1	12/1/2020 2:21:00 AM	B73664
Xylenes, Total	ND	1.5		µg/L	1	12/1/2020 2:21:00 AM	B73664
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	12/1/2020 2:21:00 AM	B73664
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	12/1/2020 2:21:00 AM	B73664
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	12/1/2020 2:21:00 AM	B73664
Surr: Toluene-d8	92.6	70-130		%Rec	1	12/1/2020 2:21:00 AM	B73664

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-9
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 3:35:00 PM
Lab ID: 2011C71-012 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 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	12/1/2020 2:44:00 AM	B73664
Toluene	ND	1.0		µg/L	1	12/1/2020 2:44:00 AM	B73664
Ethylbenzene	ND	1.0		µg/L	1	12/1/2020 2:44:00 AM	B73664
Xylenes, Total	ND	1.5		µg/L	1	12/1/2020 2:44:00 AM	B73664
Surr: 1,2-Dichloroethane-d4	89.5	70-130		%Rec	1	12/1/2020 2:44:00 AM	B73664
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	12/1/2020 2:44:00 AM	B73664
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	12/1/2020 2:44:00 AM	B73664
Surr: Toluene-d8	94.6	70-130		%Rec	1	12/1/2020 2:44:00 AM	B73664

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 4:05:00 PM
Lab ID: 2011C71-013 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 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	12/1/2020 3:07:00 AM	B73664
Toluene	ND	1.0		µg/L	1	12/1/2020 3:07:00 AM	B73664
Ethylbenzene	ND	1.0		µg/L	1	12/1/2020 3:07:00 AM	B73664
Xylenes, Total	ND	1.5		µg/L	1	12/1/2020 3:07:00 AM	B73664
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%Rec	1	12/1/2020 3:07:00 AM	B73664
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	12/1/2020 3:07:00 AM	B73664
Surr: Dibromofluoromethane	99.1	70-130		%Rec	1	12/1/2020 3:07:00 AM	B73664
Surr: Toluene-d8	93.8	70-130		%Rec	1	12/1/2020 3:07:00 AM	B73664

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-17
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 4:30:00 PM
Lab ID: 2011C71-014 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	8.7	1.0		µg/L	1	12/1/2020 3:30:00 AM	B73664
Toluene	ND	1.0		µg/L	1	12/1/2020 3:30:00 AM	B73664
Ethylbenzene	ND	1.0		µg/L	1	12/1/2020 3:30:00 AM	B73664
Xylenes, Total	ND	1.5		µg/L	1	12/1/2020 3:30:00 AM	B73664
Surr: 1,2-Dichloroethane-d4	89.9	70-130		%Rec	1	12/1/2020 3:30:00 AM	B73664
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	12/1/2020 3:30:00 AM	B73664
Surr: Dibromofluoromethane	100	70-130		%Rec	1	12/1/2020 3:30:00 AM	B73664
Surr: Toluene-d8	94.5	70-130		%Rec	1	12/1/2020 3:30:00 AM	B73664

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011C71**
Date Reported: **12/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1
Project: Trunk 6C Kutz Wash **Collection Date:** 11/24/2020 5:05:00 PM
Lab ID: 2011C71-015 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	730	20		µg/L	20	12/1/2020 3:53:00 AM	B73664
Toluene	290	20		µg/L	20	12/1/2020 3:53:00 AM	B73664
Ethylbenzene	61	20		µg/L	20	12/1/2020 3:53:00 AM	B73664
Xylenes, Total	180	30		µg/L	20	12/1/2020 3:53:00 AM	B73664
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	20	12/1/2020 3:53:00 AM	B73664
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	20	12/1/2020 3:53:00 AM	B73664
Surr: Dibromofluoromethane	96.4	70-130		%Rec	20	12/1/2020 3:53:00 AM	B73664
Surr: Toluene-d8	94.5	70-130		%Rec	20	12/1/2020 3:53:00 AM	B73664

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011C71**
03-Dec-20

Client: ENSOLUM
Project: Trunk 6C Kutz Wash

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **B73678**	RunNo: **73678**
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596795** 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		98.2	80	120			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **B73678**	RunNo: **73678**
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596796** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.2	80	120			
Toluene	19	1.0	20.00	0	97.0	80	120			
Ethylbenzene	19	1.0	20.00	0	97.3	80	120			
Xylenes, Total	58	2.0	60.00	0	97.3	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		102	80	120			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011C71**
03-Dec-20

Client: ENSOLUM
Project: Trunk 6C Kutz Wash

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **B73664** RunNo: **73664**
Prep Date: Analysis Date: **12/1/2020** SeqNo: **2597691** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	20	1.0	20.00	0	99.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.1	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.3	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **B73664** RunNo: **73664**
Prep Date: Analysis Date: **12/1/2020** SeqNo: **2597692** 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	8.9		10.00		89.3	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.5	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.3	70	130			
Surr: Toluene-d8	9.2		10.00		92.5	70	130			

Sample ID: **2011C71-010ams** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-3** Batch ID: **B73664** RunNo: **73664**
Prep Date: Analysis Date: **12/1/2020** SeqNo: **2597694** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.1	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	70	130			

Sample ID: **2011C71-010amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-3** Batch ID: **B73664** RunNo: **73664**
Prep Date: Analysis Date: **12/1/2020** SeqNo: **2597695** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130	6.28	20	
Toluene	20	1.0	20.00	0	101	70	130	4.48	20	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011C71**
03-Dec-20

Client: ENSOLUM
Project: Trunk 6C Kutz Wash

Sample ID: **2011C71-010amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-3** Batch ID: **B73664** RunNo: **73664**
Prep Date: Analysis Date: **12/1/2020** SeqNo: **2597695** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.6		10.00		95.8	70	130	0	0	
Surr: Dibromofluoromethane	9.8		10.00		97.6	70	130	0	0	
Surr: Toluene-d8	9.4		10.00		94.1	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	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **2011C71** RcptNo: **1**

Received By: **Sean Livingston** **11/25/2020 8:00:00 AM** Sean Livingston

Completed By: **Desiree Dominguez** **11/25/2020 11:34:44 AM** DD

Reviewed By: SGL 11/25/20

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° 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 11/25/20

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	1.7	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande ~~Ste Suite A~~
Aztec, NM 87410

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: Trunk 6C Kutz Wash

Project #: 05A1226-011

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.6 +0.1 = 1.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2011C71	BTEX / MTBE / TMB's (8021)	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)
11/24/20	10:10	W	~~MW-2~~ MW-5	3x40mL VOA	$HgCl_2$	-001	X									
11/24/20	10:50	W	MW-6	3x40mL VOA	$HgCl_2$	-002	X									
11/24/20	11:20	W	MW-7	3x40mL VOA	$HgCl_2$	-003	X									
11/24/20	11:30	W	MW-13	3x40mL VOA	$HgCl_2$	-004	X									
11/24/20	12:35	W	MW-15	3x40mL VOA	$HgCl_2$	-005	X									
11/24/20	13:05	W	MW-14	3x40mL VOA	$HgCl_2$	-006	X									
11/24/20	13:30	W	MW-8	3x40mL VOA	$HgCl_2$	-007	X									
11/24/20	14:05	W	MW-2	3x40mL VOA	$HgCl_2$	-008	X									
11/24/20	14:10	W	MW-10	3x40mL VOA	$HgCl_2$	-009	X									
11/24/20	14:40	W	MW-3	3x40mL VOA	$HgCl_2$	-010	X									
11/24/20	14:45	W	MW-11	3x40mL VOA	$HgCl_2$	-011	X									
11/24/20	15:35	W	MW-9	3x40mL VOA	$HgCl_2$	-012	X									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/24/20	18:45		SGL	Courier	11/25/20	8:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
Bill to Ensolum

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.

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A

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: Trunk 6C Kutz Wash

Project #: 05A1226011

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.6 +0.1 = 1.7 (°C)

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Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2011C71	BTEX / MTBE / TMB's (8021)	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)
11/24/20	16:05	W	MW-4	3x40mL VOA	$HgCl_2$	-013	X									
11/24/20	16:30	W	MW-17	3x40mL VOA	$HgCl_2$	-014	X									
11/24/20	17:05	W	MW-1	3x40mL VOA	$HgCl_2$	-015	X									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/24/20	18:45		SGL	courier	11/25/20	8:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Bill to Ensolum

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District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 41349

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 41349
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2020 Groundwater Monitoring Report: Content satisfactory 1. Follow recommendations stated within 2020 Groundwater Monitoring Report. a. continue SA-GWM&S activities to evaluate the stability of COC concentrations in subsurface groundwater conduct additional site-specific aquifer characterization b. conduct additional site-specific aquifer characterization & testing to evaluate the options to remediate areas of GWQ exceedances c. submit a Stage 2 Abatement Plan once the Stage 1 Abatement Plan has been deemed administratively complete d. the suspension of monitoring and sampling activities of MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14, and MW-15 is approved.	12/28/2021