ENSOLUM

2023 Groundwater Monitoring Report and Request for Closure

Property:

Masden Gas Com #1E (02/05/15)
Unit Letter C, S28 T29N R11W
San Juan County, New Mexico

New Mexico EMNRD OCD RP No. 3RP-1003
Incident ID No. nCS1507252223

March 5, 2024

Ensolum Project No. 05A1226026

Prepared for:

Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401
Attn: Mr. Thomas Long

Prepared by:

Ranee Deechilly
Project Manager

Kyle Summers
Senior Managing Geologist

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LIST OF APPENDICES

1.0 INTRODUCTION

Ensolum, LLC (Ensolum) has completed this report for the Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise) Masden Gas Com #1E (02/05/15) site, referred to hereinafter as the "Site". This report documents the groundwater monitoring activities conducted at the Site in January and April 2023 and requests concurrence that abatement has been completed.

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC
Site Name:	Masden Gas Com #1E (02/05/15)
NM EMNRD OCD Incident ID No.	nCS1507252223
Location:	36.70096° North, 108.00164° West Unit Letter C, Section 28, Township 29 North, Range 11 West Bloomfield, San Juan County, New Mexico
Property:	Private Land
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On February 5, 2015, a release of natural gas from the Masden Gas Com #1E pipeline was discovered. Enterprise performed pipeline repair activities and removed petroleum hydrocarbon-affected soils from the Site. During corrective action activities, groundwater was encountered at four feet below grade surface (bgs). Souder, Miller & Associates (SMA) collected five soil samples and one water sample from the pipeline repair excavation. Analytical results identified benzene, toluene, ethylbenzene, total xylenes, and total petroleum hydrocarbon (TPH) concentrations above the New Mexico EMNRD OCD closure criteria in soil and above New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) in groundwater (*Masden Gas Com #1E Pipeline Release and Subsurface Water Investigation Plan*, SMA, April 17, 2015).

During July 2015, SMA performed site investigation activities to evaluate the apparent impact of shallow groundwater. SMA installed and sampled five groundwater monitoring wells (MW-1 through MW-5). The resulting groundwater analytical results identified COC concentrations above WQCC GQSs in monitoring wells MW-2 and MW-3 (*Groundwater Investigation Report Masden Gas Com #1E Natural Gas Pipeline Release*, SMA, August 25, 2015).

During February 2016, Apex TITAN, Inc., (Apex) conducted a groundwater monitoring event at the Site. Analytical results indicated benzene concentrations above applicable WQCC GQSs in monitoring well MW-2 (*Masden Gas Com #1E Groundwater Monitoring Report (February 2016 Event)*, Apex, April 18, 2016).

During October 2016, a work plan was submitted to the New Mexico EMNRD OCD that described Enterprise's proposed plan to implement supplemental corrective action activities (groundwater removal) at monitoring well MW-2 to reduce COC concentrations in groundwater and to conduct groundwater monitoring at the Site to evaluate the pumping effectiveness (*Supplemental Corrective Action and Groundwater Monitoring Work Plan,* Apex, October 3, 2016). Since the approval of the work plan, approximately 3,000 gallons of total fluids were removed from monitoring well MW-2. During February 2019, Enterprise reassigned management of the project to Ensolum, LLC (Ensolum). In 2020, the first two quarters of groundwater pumping ended prematurely with the failure of the submersible pump. Pumping was not resumed due to planned pipeline replacement activities that might allow further remediation of the Site.

Since February 2016, a combination of quarterly and semi-annual monitoring events has been performed. Between February 2016 and February 2019 groundwater sampling events were conducted by Apex and between February 2019 and October 2022 by Ensolum. The analytical results for the groundwater samples collected from monitoring well MW-2 between 2016 and 2020 indicated that benzene concentrations were above the New Mexico WQCC GQSs. Additional information on the groundwater sampling events is provided in the *Supplemental Soil Remediation and Groundwater Monitoring Report (*Ensolum, January 18, 2021 (Revised November 10, 2021)).

During March 2020, Enterprise initiated pipeline repair activities at the Site to facilitate the replacement of a section of pipe under the road next to the well pad. During these activities Enterprise elected to attempt to remove potential residual soil impact from the 2015 release. During the excavation activities, monitoring well MW-2 was inadvertently destroyed. Approximately 236 cubic yards of soil and 460 barrels (bbls) of water were transported to the Industrial Ecosystems, Inc., (IEI) landfarm on Crouch Mesa near Aztec, New Mexico for disposal/remediation (*Supplemental Soil Remediation and Groundwater Monitoring Report*, Ensolum, January 18, 2021 (Revised November 10, 2021)).

On May 24, 2021, one soil boring was advanced at the Site utilizing a hollow stem auger drilling rig. The soil boring was then completed as a permanent monitoring well (MW-2R) to replace monitoring well MW-2 that was destroyed during 2020 pipeline replacement activities. Two soil samples were collected from the soil boring and were submitted for laboratory analysis. The soil samples did not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria (*Supplemental Soil Remediation and Groundwater Monitoring Report*, Ensolum, January 18, 2021 (Revised November 10, 2021, to include additional historical data)).

Since July 2021, quarterly groundwater monitoring events have been implemented by Ensolum. Since that time, COC concentrations have not been detected in groundwater. These results have demonstrated that the removal of residual soil impact during 2020 has mitigated the impact to groundwater at the Site. Groundwater monitoring activities performed at the Site since July 2021 are detailed in the following reports:

- 2021 4th Groundwater Monitoring Report, Ensolum, February 23, 2022
- 2022 Groundwater Monitoring Report, Ensolum, February 12, 2023

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, depicts the approximate locations of the monitoring wells in relation to pertinent structures and general Site boundaries, is included as **Figure 2** of **Appendix A**.

1.2 Project Objective

The objective of the groundwater monitoring events was to further evaluate and monitor potential COCs in groundwater at the Site and to demonstrate compliance with the abatement standards and requirements of Subsections A, B, and D of 19.15.30.9 New Mexico Administrative Code (NMAC).

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address the activities related to oil and gas releases, the New Mexico EMNRD OCD references 19.15.29 NMAC, which establishes investigation and abatement action requirements for oil and gas release sites subject to reporting and/or corrective action. Additionally, the New Mexico EMNRD OCD

utilizes the New Mexico WQCC GQSs that are identified in 20.6.2 NMAC to evaluate groundwater conditions.

Abatement standards for groundwater at the Site include the following benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations:

New Mexico WQCC BTEX Standards for Groundwater	
Constituent[1]	**Limit**
Benzene	5 µg/L
Toluene	1,000 µg/L
Ethylbenzene	700 µg/L
Total Xylenes	600 µg/L

[1] – Constituent concentrations are in micrograms per liter (µg/L).

3.0 GROUNDWATER MONITORING

During this reporting period, Ensolum conducted groundwater sampling events during January 2023 and April 2023. The groundwater sampling program consisted of the collection of one groundwater sample from each of the monitoring wells at the Site. The New Mexico EMNRD OCD was notified of the sampling events although no representative was present during the sampling events. Regulatory correspondence is provided in **Appendix B**.

Ensolum's groundwater sampling program consisted of the following:

- Prior to sample collection, Ensolum gauged the depth to fluids in each monitoring well using an interface probe capable of detecting non-aqueous phase liquid (NAPL).

- Each designated monitoring well was sampled utilizing micro-purge low-flow sampling techniques. Following the completion of the micro-purge process, the groundwater sample was collected.

- Low-flow or low-stress sampling refers to sampling methods that are intended to minimize the stress that is imparted to the formation pore water in the vicinity of the well screen. Water level drawdown provides the best indication of the stress that is imparted by a given flow rate for a given hydrological situation. Pumping rates of 0.1 to 0.5 liters per minute (L/min) are typically maintained during the low-flow/low-stress sampling activities, using dedicated or decontaminated sampling equipment.

- During low-flow sampling, the groundwater samples are collected from each monitoring well once produced groundwater is consistent in color, clarity, pH, temperature, and conductivity. Measurements are typically observed every three to five minutes while purging. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for at least three consecutive readings.

- Groundwater samples were collected in laboratory-supplied containers (pre-preserved with mercuric chloride ($HgCl_2$)), labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico under proper chain-of-custody procedures.

3.1 Groundwater Laboratory Analytical Methods

The groundwater samples collected from the monitoring wells during the two sampling events were analyzed for BTEX utilizing U.S. Environmental Protection Agency (EPA) SW-846 Method 8021.

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

Analyte	Sample Type	No. of Samples	Method
BTEX	Groundwater	10	SW-846 8021

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

3.2 Groundwater Flow Direction

The groundwater flow direction at the Site generally trends toward the southwest. The calculated gradient during the 2023 monitoring events varied from approximately 0.0012 feet per foot (ft/ft) to 0.003 ft/ft across the Site. Groundwater elevation data collected during the 2023 gauging events are presented in **Table 2** (**Appendix C**). Groundwater gradient maps for the 2023 gauging events are included as **Figure 4A** and **4B** (**Appendix A**).

3.3 Groundwater Data Evaluation

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

- The January and April 2023 analytical results for all sampled monitoring wells do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 5 µg/L.
- The January and April 2023 analytical results for all sampled monitoring wells do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 1,000 µg/L.
- The January and April 2023 analytical results for all sampled monitoring wells do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 700 µg/L.
- The January and April 2023 analytical results for all sampled monitoring wells do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 620 µg/L.
- No data qualifier flags are associated with the January and April 2023 analytical results.

4.0 FINDINGS

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

- The groundwater flow direction at the Site is generally towards the southwest, with a gradient that varied from 0.0012 ft/ft to 0.003 ft/ft across the Site.
- The January and April 2023 groundwater samples did not exhibit COC concentrations above the applicable WQCC GQSs.

5.0 RECOMMENDATIONS

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

- Submit the report to the New Mexico EMNRD OCD for the director's approval pursuant to Subsections A and E of 19.15.30.16 NMAC.
- Pursuant to Subsection D of 19.15.30.9 NMAC, request director approval for concurrence of completion of abatement of water contaminants based on eight consecutive groundwater sampling events demonstrating no residual impact to groundwater above groundwater quality standards.
- Pursuant to Paragraph (7) of Subsection A of 19.15.30.12 request that an abatement plan not be required based on the demonstration that the standards of Subsections A, B, and D of 19.15.30.9 have been met.
- Request approval to plug and abandon the groundwater monitoring wells.

6.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

6.1 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).

6.2 Limitations

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

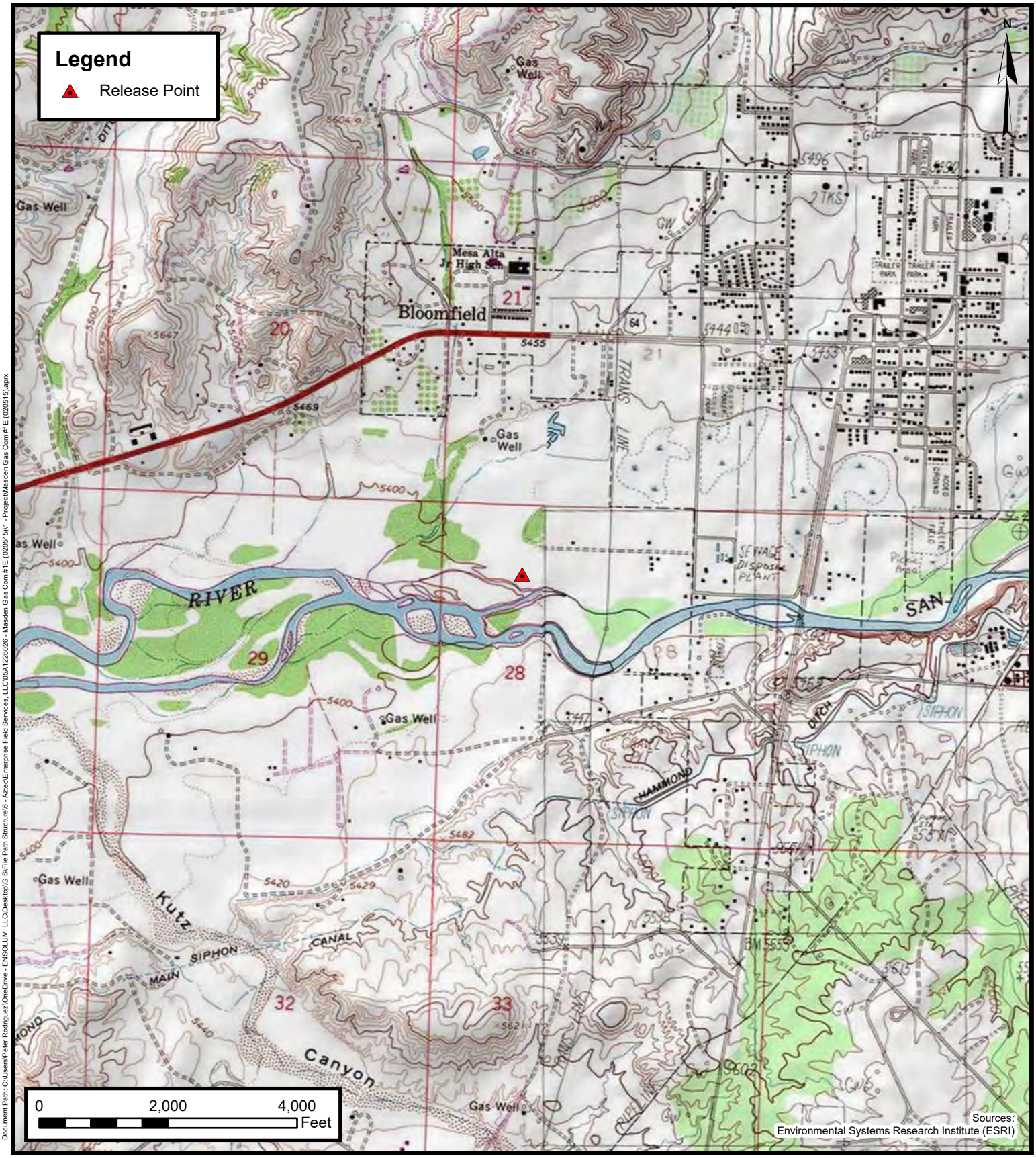
6.3 Reliance

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

ENSOLUM

APPENDIX A

Figures



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ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Topographic Map

Enterprise Field Services, LLC
Masden Gas Com #1E (02/05/15)
Project Number: 05A1226026
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico
36.70096, -108.00164

FIGURE

1

Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\6 - Aztec\Enterprise Field Services, LLC\05A1226026 - Masden Gas Com #1E (020515)\1 - Project\Masden Gas Com #1E (020515).aprx

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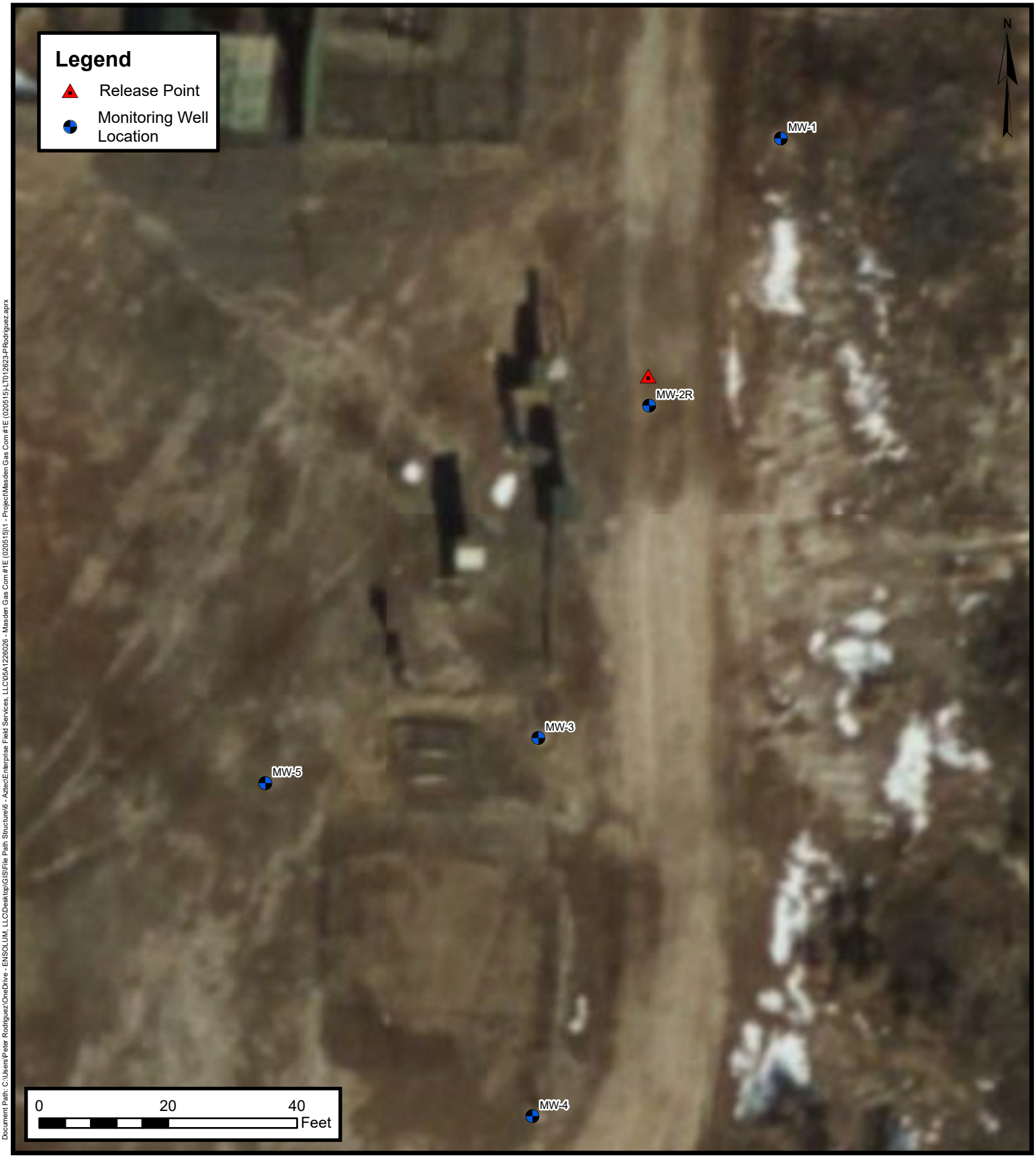
Environmental, Engineering and Hydrogeologic Consultants

Site Vicinity Map

Enterprise Field Services, LLC
Masden Gas Com #1E (02/05/15)
Project Number: 05A1226026
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico
36.70096, -108.00164

FIGURE
2



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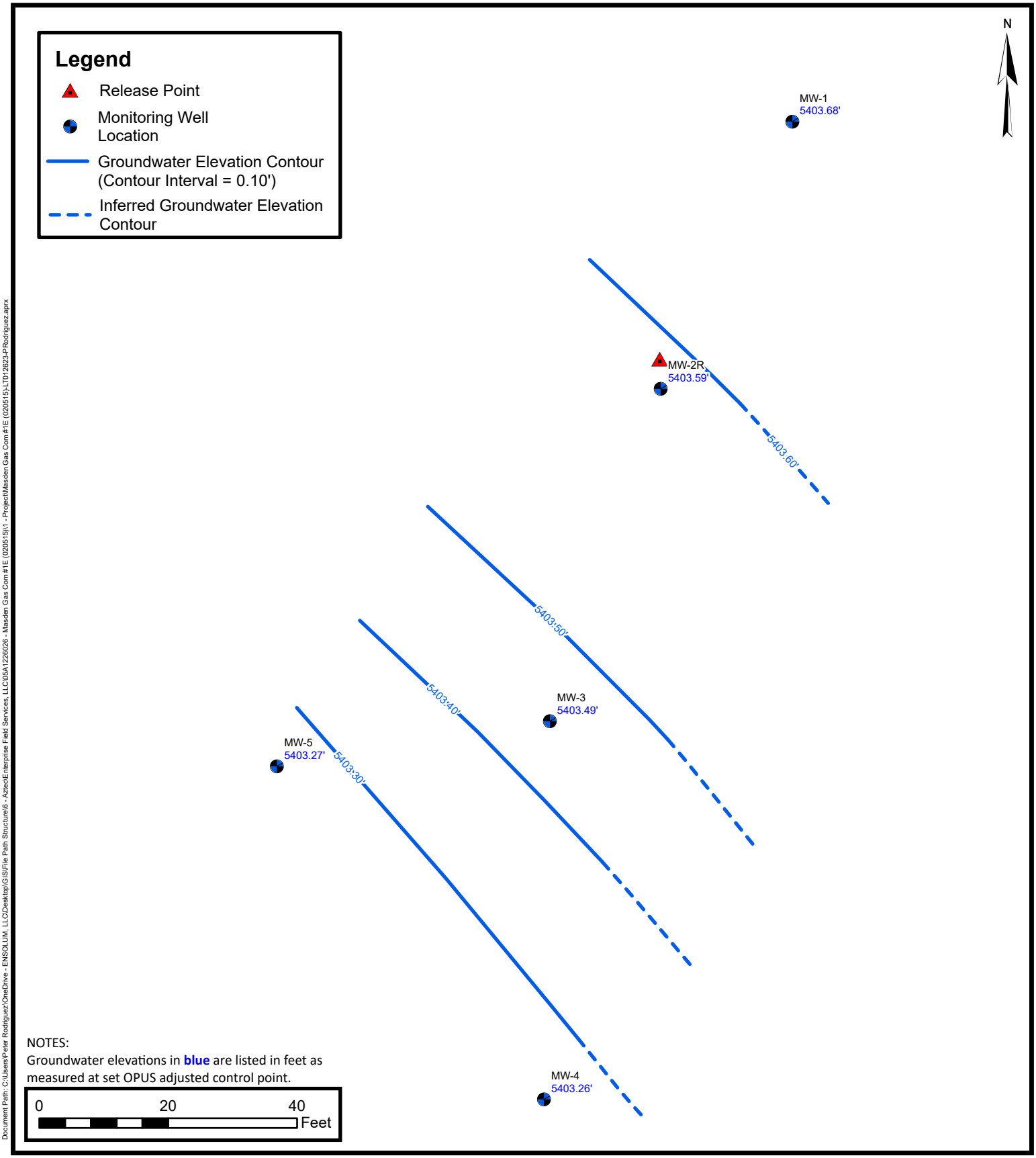
Environmental, Engineering and Hydrogeologic Consultants

Site Map

Enterprise Field Services, LLC
Masden Gas Com #1E (02/05/15)
Project Number: 05A1226026
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico
36.70096, -108.00164

FIGURE
3



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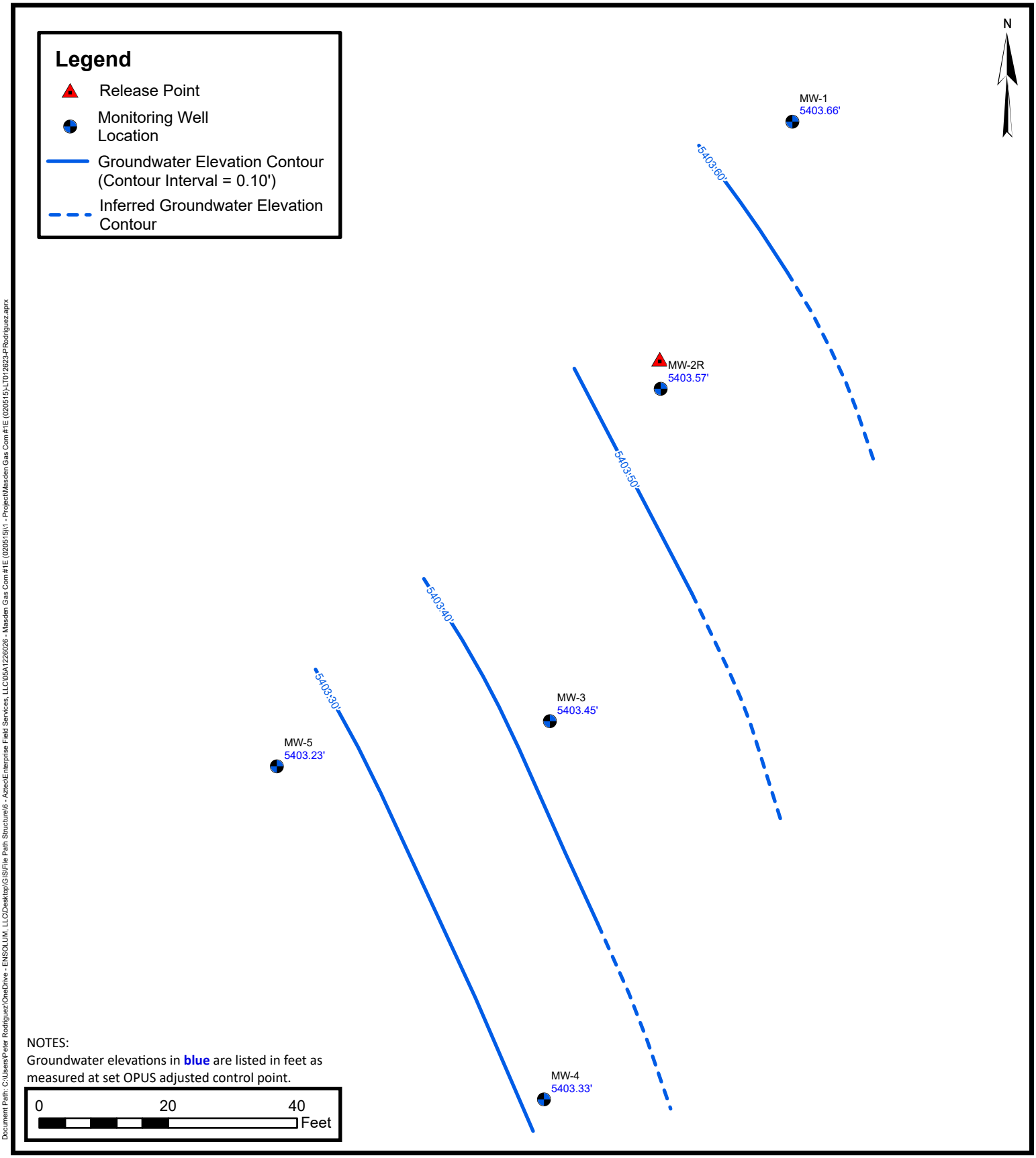
Environmental, Engineering and Hydrogeologic Consultants

Groundwater Gradient Map (January 2023)

Enterprise Field Services, LLC
Masden Gas Com #1E (02/05/15)
Project Number: 05A1226026
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico
36.70096, -108.00164

FIGURE
4A



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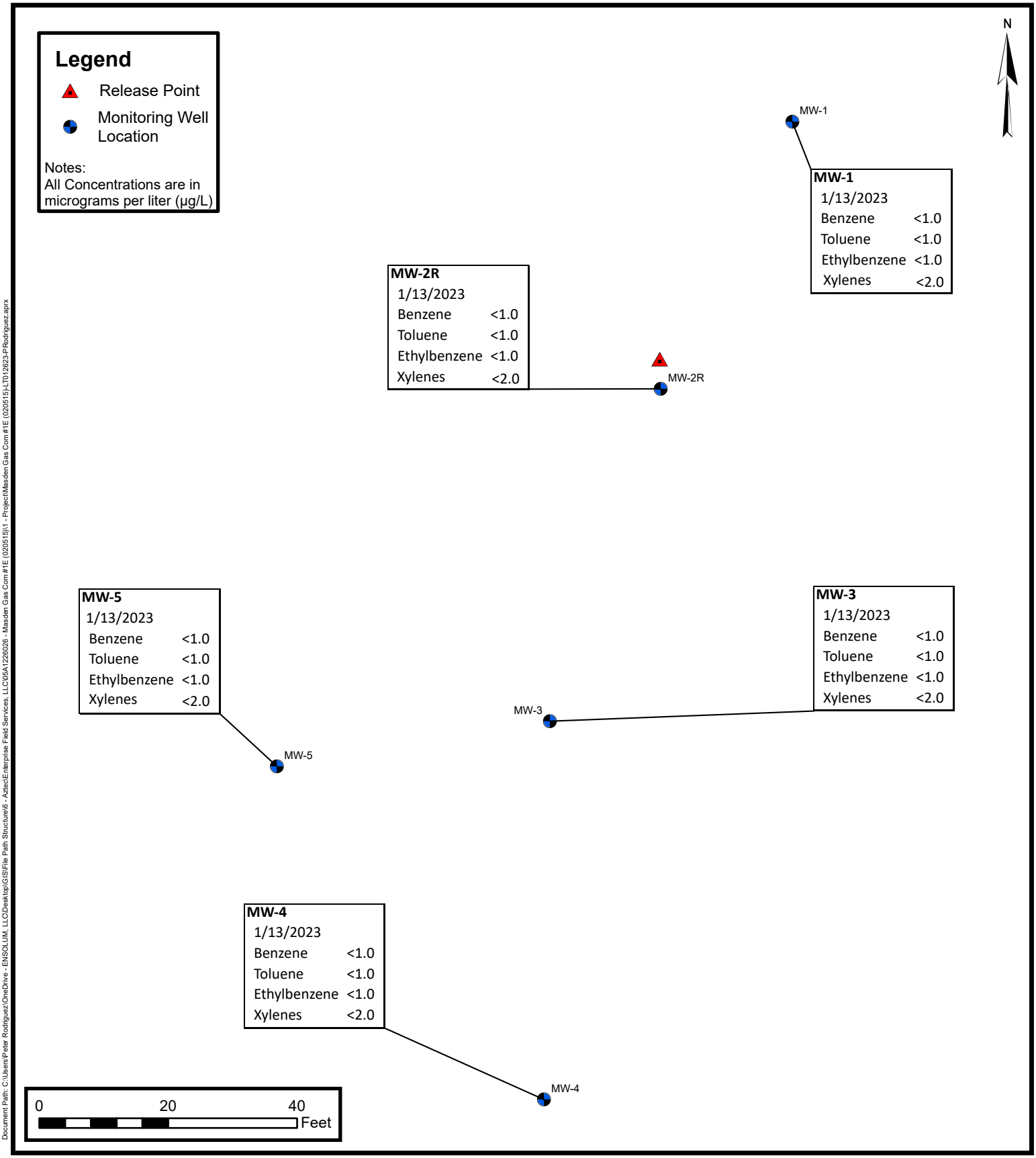
Environmental, Engineering and Hydrogeologic Consultants

Groundwater Gradient Map (April 2023)

Enterprise Field Services, LLC
Masden Gas Com #1E (02/05/15)
Project Number: 05A1226026
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico
36.70096, -108.00164

FIGURE
4B



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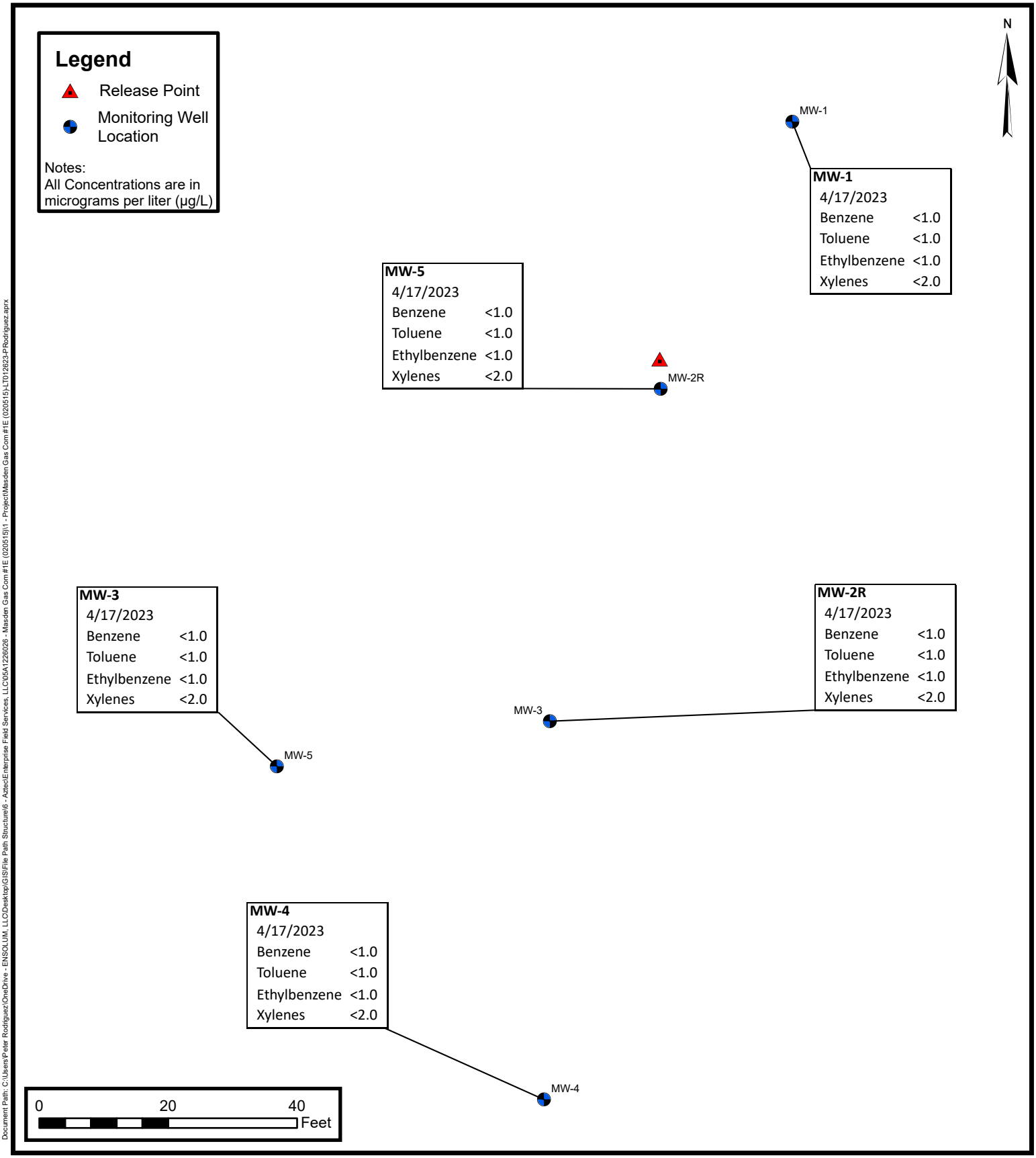
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Groundwater Analytical Data Map (January 2023)

Enterprise Field Services, LLC
Masden Gas Com #1E (02/05/15)
Project Number: 05A1226026
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico
36.70096, -108.00164

FIGURE
5A



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ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Groundwater Analytical Data Map
(April 2023)
Enterprise Field Services, LLC
Masden Gas Com #1E (02/05/15)
Project Number: 05A1226026
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico
36.70096, -108.00164

FIGURE
5B

ENSOLUM

APPENDIX B

Regulatory Correspondence

From: Long, Thomas
To: "Velez, Nelson, EMNRD"
Cc: Stone, Brian; "Kyle Summers"
Subject: FW: [EXTERNAL] FW: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080, -108.0013; San Juan County, NM
Date: Thursday, April 13, 2023 2:10:00 PM

Nelson,

This email is a notification that Enterprise will be performing groundwater monitoring/sampling activities at the Masden GC #1E Release Site on Monday, April 17, 2023. Groundwater monitoring/sampling activities are anticipated to take one day. If you have any questions, please call or email.

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

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Tuesday, January 10, 2023 11:20 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] FW: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080, -108.0013; San Juan County, NM

[Use caution with links/attachments]

Tom,

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

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

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

Thanks again

Regards,

Nelson Velez ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov *NOTE NEW EMAIL ADDRESS*
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, January 10, 2023 10:50 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] FW: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080, -108.0013; San Juan County, NM

Nelson,

This email is a notification that Enterprise will be performing groundwater monitoring/sampling activities at the Masden GC #1E Release Site on Friday January 13, 2023. Groundwater monitoring/sampling activities are anticipated to take one day. If you have any questions, please call or email.

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

From: Long, Thomas
Sent: Wednesday, October 12, 2022 10:29 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>

Subject: RE: [EXTERNAL] FW: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080, -108.0013; San Juan County, NM

Nelson,

This email is a notification that Enterprise will be performing groundwater monitoring/sampling activities at the Masden GC #1E Release Site on Wednesday October 19, 2022. Groundwater monitoring/sampling activities are anticipated to take one day. If you have any questions, please call or email.

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

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Tuesday, July 19, 2022 10:06 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] FW: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080, -108.0013; San Juan County, NM

[Use caution with links/attachments]
Tom,

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

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

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, notifications for sampling or drilling event(s), and request for time extension(s) or variance(s).

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

Thanks again

Regards,

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, July 19, 2022 9:45 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: [EXTERNAL] FW: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080, -108.0013; San Juan County, NM

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

Nelson,

This email is a notification that Enterprise will be performing groundwater monitoring/sampling activities at the Masden GC #1E Release Site on Friday July, 22, 2022. Groundwater monitoring/sampling activities are anticipated to take one day. If you have any questions, please call or email.

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

Enterprise Products

From: Long, Thomas
Sent: Wednesday, April 27, 2022 8:12 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080,

-108.0013; San Juan County, NM

Nelson,

This email is to notify you that Enterprise has scheduled groundwater monitoring activities at the at the Masden GC #1E for Friday April 29, 2022. We had to postpone a week because of personnel scheduling conflicts. Sampling activities are anticipated to take one day. If you have any questions, please call or email.

Sincerely,

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

Enterprise Products

From: Long, Thomas
Sent: Wednesday, April 20, 2022 11:03 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: Masden Gas Com #1E (3R-1033); Unit Letter C Section 28 T 29N R 11W; 36.70080, -108.0013; San Juan County, NM

Nelson,

This email is to notify you that Enterprise has scheduled groundwater monitoring activities at the at the Masden GC #1E for Friday April 22, 2022. Sampling activities are anticipated to take one day. If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401

505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

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APPENDIX C

Tables

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TABLE 1
Masden Gas Com #1E (02/05/15)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Chloride (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		**5**	**1,000**	**720**	**620**	**NE**
MW-1	7.10.15	<1.0	<1.0	<1.0	<1.5	210
	2.26.16	<1.0	<1.0	<1.0	<2.0	NA
	11.04.16	<1.0	<1.0	<1.0	<2.0	NA
	2.09.17	<1.0	<1.0	<1.0	<1.5	NA
	7.19.17	<1.0	<1.0	<1.0	<2.0	NA
	11.01.17	<1.0	<1.0	<1.0	<2.0	NA
	1.19.18	<1.0	<1.0	<1.0	<2.0	NA
	4.27.18	<1.0	<1.0	<1.0	<1.5	NA
	7.05.18	<1.0	<1.0	<1.0	<1.5	NA
	10.16.18	<1.0	<1.0	<1.0	<2.0	NA
	1.22.19	<1.0	<1.0	<1.0	<1.5	NA
	8.5.19	<1.0	<1.0	<1.0	<2.0	NA
	1.24.20	<1.0	<1.0	<1.0	<1.5	NA
	9.09.20	<1.0	<1.0	<1.0	<1.5	NA
	1.18.21	<1.0	<1.0	<1.0	<2.0	NA
	7.14.21	<1.0	<1.0	<1.0	<2.0	NA
	10.27.21	<1.0	<1.0	<1.0	<2.0	NA
	1.12.22	<1.0	<1.0	<1.0	<2.0	NA
	4.29.22	<1.0	<1.0	<1.0	<1.5	NA
	7.22.22	<1.0	<1.0	<1.0	<1.5	NA
	10.19.22	<1.0	<1.0	<1.0	<1.5	NA
	1.13.23	<1.0	<1.0	<1.0	<2.0	NA
	4.17.23	<1.0	<1.0	<1.0	<2.0	NA
MW-2	7.10.15	**790**	**1,300**	100	**880**	210
	2.26.16	**640**	35	55	470	NA
	11.04.16	**160**	<5.0	<5.0	52	NA
	2.09.17	**260**	<1.0	19	96	NA
	7.19.17	**44**	<1.0	5.2	4.7	NA
	11.01.17	**81**	<1.0	8.0	4.7	NA
	1.19.18	**21**	<1.0	2.5	<2.0	NA
	4.27.18	**60**	<1.0	13	24	NA
	7.05.18	**330**	4.3	27	70	NA
	10.16.18	**66**	<1.0	8.3	20	NA
	1.22.19	**600**	51	57	250	NA
	8.5.19	**150**	<1.0	16	28	NA
	1.24.20	**830**	21	28	96	NA
	9.09.20	Monitoring Well was Destroyed during the March 2020 Pipeline Repair.				
	1.18.21					
	7.14.21					
	10.27.21					

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TABLE 1
Masden Gas Com #1E (02/05/15)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Chloride (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		5	1,000	720	620	NE
MW-2R	7.14.21	<1.0	<1.0	1.0	<2.0	NA
	10.27.21	<1.0	<1.0	<1.0	<2.0	NA
	1.22.22	<1.0	<1.0	<1.0	<2.0	NA
	4.29.22	<1.0	<1.0	<1.0	<1.5	NA
	7.22.22	<1.0	<1.0	<1.0	<1.5	NA
	10.19.22	<1.0	<1.0	<1.0	<1.5	NA
	1.13.23	<1.0	<1.0	<1.0	<2.0	NA
	4.17.23	<1.0	<1.0	<1.0	<2.0	NA
MW-3	7.10.15	**95**	<5.0	<5.0	<7.5	180
	2.26.16	<1.0	<1.0	<1.0	<2.0	NA
	11.04.16	<1.0	<1.0	<1.0	<2.0	NA
	2.09.17	<1.0	<1.0	<1.0	<1.5	NA
	7.19.17	<1.0	<1.0	<1.0	<2.0	NA
	11.01.17	<1.0	<1.0	<1.0	<2.0	NA
	1.19.18	<1.0	<1.0	<1.0	<2.0	NA
	4.27.18	<1.0	<1.0	<1.0	<1.5	NA
	7.05.18	<1.0	<1.0	<1.0	<1.5	NA
	10.16.18	<1.0	<1.0	<1.0	<2.0	NA
	1.22.19	<1.0	<1.0	<1.0	<1.5	NA
	8.5.19	<1.0	<1.0	<1.0	<2.0	NA
	1.24.20	<1.0	<1.0	<1.0	<1.5	NA
	9.09.20	<1.0	<1.0	<1.0	<1.5	NA
	1.18.21	<1.0	<1.0	<1.0	<2.0	NA
	7.14.21	<1.0	<1.0	<1.0	<2.0	NA
	10.27.21	<1.0	<1.0	<1.0	<2.0	NA
	1.12.22	<1.0	<1.0	<1.0	<2.0	NA
	4.29.22	<1.0	<1.0	<1.0	<1.5	NA
	7.22.22	<1.0	<1.0	<1.0	<1.5	NA
	10.19.22	<1.0	<1.0	<1.0	<1.5	NA
	1.13.23	<1.0	<1.0	<1.0	<2.0	NA
	4.17.23	<1.0	<1.0	<1.0	<2.0	NA

ENSOLUM

TABLE 1
Masden Gas Com #1E (02/05/15)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Chloride (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		5	1,000	720	620	NE
MW-4	7.10.15	<1.0	<1.0	<1.0	<1.5	230
	2.26.16	<1.0	<1.0	<1.0	<2.0	NA
	11.04.16	<1.0	<1.0	<1.0	<2.0	NA
	2.09.17	<1.0	<1.0	<1.0	<1.5	NA
	7.19.17	<1.0	<1.0	<1.0	<2.0	NA
	11.01.17	<1.0	<1.0	<1.0	<2.0	NA
	1.19.18	<1.0	<1.0	<1.0	<2.0	NA
	4.27.18	<1.0	<1.0	<1.0	<1.5	NA
	7.05.18	<1.0	<1.0	<1.0	<1.5	NA
	10.16.18	<1.0	<1.0	<1.0	<2.0	NA
	1.22.19	<1.0	<1.0	<1.0	<1.5	NA
	8.5.19	<1.0	<1.0	<1.0	<2.0	NA
	1.24.20	<1.0	<1.0	<1.0	<1.5	NA
	9.09.20	<1.0	<1.0	<1.0	<1.5	NA
	1.18.21	<1.0	<1.0	<1.0	<2.0	NA
	7.14.21	<1.0	<1.0	<1.0	<2.0	NA
	10.27.21	<1.0	<1.0	<1.0	<2.0	NA
	1.12.22	<1.0	<1.0	<1.0	<2.0	NA
	4.29.22	<1.0	<1.0	<1.0	<1.5	NA
	7.22.22	<1.0	<1.0	<1.0	<1.5	NA
	10.19.22	<1.0	<1.0	<1.0	<1.5	NA
	1.13.23	<1.0	<1.0	<1.0	<2.0	NA
	4.17.23	<1.0	<1.0	<1.0	<2.0	NA

ENSOLUM

TABLE 1
Masden Gas Com #1E (02/05/15)
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Chloride (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		**5**	**1,000**	**720**	**620**	**NE**
MW-5	7.10.15	<2.0	<2.0	<2.0	<3.0	170
	2.26.16	<1.0	<1.0	<1.0	<2.0	NA
	11.04.16	<1.0	<1.0	<1.0	<2.0	NA
	2.09.17	<1.0	<1.0	<1.0	<1.5	NA
	7.19.17	<1.0	<1.0	<1.0	<2.0	NA
	11.01.17	<1.0	<1.0	<1.0	<2.0	NA
	1.19.18	<1.0	<1.0	<1.0	<2.0	NA
	4.27.18	<1.0	<1.0	<1.0	<1.5	NA
	7.05.18	<1.0	<1.0	<1.0	<1.5	NA
	10.16.18	<1.0	<1.0	<1.0	<2.0	NA
	1.22.19	<1.0	<1.0	<1.0	<1.5	NA
	8.5.19	<1.0	<1.0	<1.0	<2.0	NA
	1.24.20	<1.0	<1.0	<1.0	<1.5	NA
	9.09.20	<1.0	<1.0	<1.0	<1.5	NA
	1.18.21	<1.0	<1.0	<1.0	<2.0	NA
	7.14.21	<1.0	<1.0	<1.0	<2.0	NA
	10.27.21	<1.0	<1.0	<1.0	<2.0	NA
	1.12.22	<1.0	<1.0	<1.0	<2.0	NA
	4.29.22	<1.0	<1.0	<1.0	<1.5	NA
	7.22.22	<1.0	<1.0	<1.0	<1.5	NA
	10.19.22	<1.0	<1.0	<1.0	<1.5	NA
	1.13.23	<1.0	<1.0	<1.0	<2.0	NA
	4.17.23	<1.0	<1.0	<1.0	<2.0	NA

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

NA = Not Analyzed

NE = Not Established

µg/L = microgram per liter

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

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TABLE 2
Masden Gas Com #1E (02/05/15)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation (feet AMSL)
MW-1	7.10.15	ND	6.68	ND	5409.52	5402.84
	2.26.16	ND	6.13	ND		5403.39
	11.04.16	ND	6.73	ND		5402.79
	2.09.17	ND	5.90	ND		5403.62
	7.19.17	ND	6.89	ND		5402.63
	11.01.17	ND	6.69	ND		5402.83
	1.19.18	ND	6.45	ND		5403.07
	4.27.18	ND	6.32	ND		5403.20
	7.05.18	ND	7.07	ND		5402.45
	10.16.18[1]	ND	6.97	ND		5402.55
	1.22.19	ND	6.38	ND		5403.14
	8.05.19	ND	7.04	ND		5402.48
	1.24.20	ND	5.99	ND		5403.53
	9.09.20	ND	6.93	ND		5402.59
	1.18.20	ND	6.33	ND		5403.19
	7.14.21	ND	6.96	ND	5409.71	5402.75
	10.27.21	ND	6.79	ND		5402.92
	1.12.22	ND	6.39	ND		5403.32
	4.29.22	ND	6.24	ND		5403.47
	7.22.22	ND	7.03	ND		5402.68
	10.19.22	ND	6.80	ND		5402.91
	1.13.23	ND	6.03	ND		5403.68
	4.17.23	ND	6.05	ND		5403.66
MW-2	7.10.15	ND	3.97	ND	5406.67	5402.70
	2.26.16	ND	3.31	ND		5403.36
	11.04.16	ND	3.92	ND		5402.75
	6.9.16	ND	3.24	ND		5403.43
	2.09.17	ND	3.10	ND		5403.57
	7.19.17	ND	4.06	ND		5402.61
	11.01.17	ND	3.88	ND		5402.79
	1.19.18	ND	3.64	ND		5403.03
	4.27.18	ND	3.49	ND		5403.18
	7.05.18	ND	4.24	ND		5402.43
	10.16.18	ND	4.11	ND		5402.56
	1.22.19	ND	3.56	ND		5403.11
	8.05.19	ND	4.07	ND		5402.60
	1.24.20	ND	3.05	ND		5403.62
	9.09.20	Monitoring Well was Destroyed during the March 2020 Pipeline Repair.				
	10.27.21					
	1.12.22					
	4.29.22					
	7.22.22					
	10.19.22					
	1.13.23					
	4.17.23					

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TABLE 2
Masden Gas Com #1E (02/05/15)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation (feet AMSL)
MW-2R	7.14.21	ND	4.28	ND	5406.94	5402.66
	10.27.21	ND	4.10	ND		5402.84
	1.12.22	ND	3.71	ND		5403.23
	4.29.22	ND	3.59	ND		5403.35
	7.22.22	ND	4.53	ND		5402.41
	10.19.22	ND	4.09	ND		5402.85
	1.13.23	ND	3.35	ND		5403.59
	4.17.23	ND	3.37	ND		5403.57
MW-3	7.10.15	ND	6.89	ND	5409.45	5402.56
	2.26.16	ND	6.20	ND		5403.25
	11.04.16	ND	6.78	ND		5402.67
	2.09.17	ND	5.97	ND		5403.48
	7.19.17	ND	6.96	ND		5402.49
	11.01.17	ND	6.72	ND		5402.73
	1.19.18	ND	6.53	ND		5402.92
	4.27.18	ND	6.39	ND		5403.06
	7.05.18	ND	7.12	ND		5402.33
	10.16.18	ND	6.95	ND		5402.50
	1.22.19	ND	6.46	ND		5402.99
	8.05.19	ND	7.08	ND		5402.37
	1.24.20	ND	6.06	ND		5403.39
	9.09.20	ND	6.94	ND		5402.51
	1.18.20	ND	6.42	ND		5403.03
	7.14.21	ND	7.04	ND	5409.60	5402.56
	10.27.21	ND	6.83	ND		5402.77
	1.12.22	ND	6.46	ND		5403.14
	4.29.22	ND	7.10	ND		5402.50
	7.22.22	ND	6.37	ND		5403.23
	10.19.22	ND	6.81	ND		5402.79
	1.13.23	ND	6.11	ND		5403.49
	4.17.23	ND	6.15	ND		5403.45

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TABLE 2
Masden Gas Com #1E (02/05/15)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation (feet AMSL)
MW-4	7.10.15	ND	6.71	ND	5409.21	5402.50
	2.26.16	ND	6.00	ND		5403.21
	11.04.16	ND	6.57	ND		5402.64
	2.09.17	ND	6.80	ND		5402.41
	7.19.17	ND	6.75	ND		5402.46
	11.01.17	ND	6.51	ND		5402.70
	1.19.18	ND	6.27	ND		5402.94
	4.27.18	ND	6.18	ND		5403.03
	7.05.18	ND	6.93	ND		5402.28
	10.16.18	ND	6.73	ND		5402.48
	1.22.19	ND	6.26	ND		5402.95
	8.05.19	ND	6.87	ND		5402.34
	1.24.20	ND	5.86	ND		5403.35
	9.09.20	ND	6.71	ND		5402.50
	1.18.20	ND	6.22	ND		5402.99
	7.14.21	ND	6.85	ND	5409.31	5402.36
	10.27.21	ND	6.63	ND		5402.58
	1.12.22	ND	6.28	ND		5402.93
	4.29.22	ND	6.23	ND		5402.98
	7.22.22	ND	6.92	ND		5402.29
	10.19.22	ND	6.60	ND		5402.61
	1.13.23	ND	5.95	ND		5403.26
	4.17.23	ND	5.98	ND		5403.33

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TABLE 2
Masden Gas Com #1E (02/05/15)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation (feet AMSL)
MW-5	7.10.15	ND	3.28	ND	5405.75	5402.47
	2.26.16	ND	2.58	ND		5403.17
	11.04.16	ND	3.14	ND		5402.61
	2.09.17	ND	2.36	ND		5403.39
	7.19.17	ND	3.32	ND		5402.43
	11.01.17	ND	3.08	ND		5402.67
	1.19.18	ND	2.88	ND		5402.87
	4.27.18	ND	2.76	ND		5402.99
	7.05.18	ND	3.50	ND		5402.25
	10.16.18	ND	3.31	ND		5402.44
	1.22.19	ND	2.82	ND		5402.93
	8.05.19	ND	3.43	ND		5402.32
	1.24.20	ND	2.42	ND		5403.33
	9.09.20	ND	3.29	ND		5402.46
	1.18.20	ND	2.79	ND		5402.96
	7.14.21	ND	3.39	ND	5405.89	5402.36
	10.27.21	ND	3.18	ND		5402.57
	1.12.22	ND	2.83	ND		5402.92
	4.29.22	ND	2.75	ND		5403.00
	7.22.22	ND	3.46	ND		5402.29
	10.19.22	ND	3.15	ND		5402.60
	1.13.23	ND	2.48	ND		5403.27
	4.17.23	ND	2.52	ND		5403.23

[1] *= Aberrant gauging data*
BTOC - below top of casing
AMSL - above mean sea level
TOC - top of casing

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APPENDIX D

Laboratory Data Sheets & Chain of Custody Documentation

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

January 18, 2023

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

RE: Masden Gas Com 1E OrderNo.: 2301551

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 1/14/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2301551**
Date Reported: **1/18/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: Masden Gas Com 1E **Collection Date:** 1/13/2023 10:10:00 AM
Lab ID: 2301551-001 **Matrix:** AQUEOUS **Received Date:** 1/14/2023 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	1.0		µg/L	1	1/16/2023 7:23:51 PM	B93978
Toluene	ND	1.0		µg/L	1	1/16/2023 7:23:51 PM	B93978
Ethylbenzene	ND	1.0		µg/L	1	1/16/2023 7:23:51 PM	B93978
Xylenes, Total	ND	2.0		µg/L	1	1/16/2023 7:23:51 PM	B93978
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/16/2023 7:23:51 PM	B93978

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

Qualifiers:

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

Analytical Report
Lab Order **2301551**
Date Reported: **1/18/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: Masden Gas Com 1E **Collection Date:** 1/13/2023 10:45:00 AM
Lab ID: 2301551-002 **Matrix:** AQUEOUS **Received Date:** 1/14/2023 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	1.0		µg/L	1	1/16/2023 8:34:29 PM	B93978
Toluene	ND	1.0		µg/L	1	1/16/2023 8:34:29 PM	B93978
Ethylbenzene	ND	1.0		µg/L	1	1/16/2023 8:34:29 PM	B93978
Xylenes, Total	ND	2.0		µg/L	1	1/16/2023 8:34:29 PM	B93978
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	1/16/2023 8:34:29 PM	B93978

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

Qualifiers:

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

Analytical Report
Lab Order **2301551**
Date Reported: **1/18/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: Masden Gas Com 1E **Collection Date:** 1/13/2023 11:15:00 AM
Lab ID: 2301551-003 **Matrix:** AQUEOUS **Received Date:** 1/14/2023 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	1.0		µg/L	1	1/16/2023 8:58:04 PM	B93978
Toluene	ND	1.0		µg/L	1	1/16/2023 8:58:04 PM	B93978
Ethylbenzene	ND	1.0		µg/L	1	1/16/2023 8:58:04 PM	B93978
Xylenes, Total	ND	2.0		µg/L	1	1/16/2023 8:58:04 PM	B93978
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	1/16/2023 8:58:04 PM	B93978

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

Qualifiers:

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

Analytical Report
Lab Order **2301551**
Date Reported: **1/18/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1
Project: Masden Gas Com 1E **Collection Date:** 1/13/2023 11:55:00 AM
Lab ID: 2301551-004 **Matrix:** AQUEOUS **Received Date:** 1/14/2023 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	1.0		µg/L	1	1/16/2023 9:21:31 PM	B93978
Toluene	ND	1.0		µg/L	1	1/16/2023 9:21:31 PM	B93978
Ethylbenzene	ND	1.0		µg/L	1	1/16/2023 9:21:31 PM	B93978
Xylenes, Total	ND	2.0		µg/L	1	1/16/2023 9:21:31 PM	B93978
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	1/16/2023 9:21:31 PM	B93978

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

Qualifiers:

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

Analytical Report
Lab Order **2301551**
Date Reported: **1/18/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2R
Project: Masden Gas Com 1E **Collection Date:** 1/13/2023 12:25:00 PM
Lab ID: 2301551-005 **Matrix:** AQUEOUS **Received Date:** 1/14/2023 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	1.0		µg/L	1	1/16/2023 9:44:59 PM	B93978
Toluene	ND	1.0		µg/L	1	1/16/2023 9:44:59 PM	B93978
Ethylbenzene	ND	1.0		µg/L	1	1/16/2023 9:44:59 PM	B93978
Xylenes, Total	ND	2.0		µg/L	1	1/16/2023 9:44:59 PM	B93978
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/16/2023 9:44:59 PM	B93978

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301551**

18-Jan-23

Client: ENSOLUM

Project: Masden Gas Com 1E

Sample ID: **2301551-001ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **MW-5** Batch ID: **B93978** RunNo: **93978**

Prep Date: Analysis Date: **1/16/2023** SeqNo: **3393249** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.1	70	130			
Toluene	19	1.0	20.00	0	93.9	70	130			
Ethylbenzene	19	1.0	20.00	0	95.4	70	130			
Xylenes, Total	58	2.0	60.00	0	96.8	70	130			
Surr: 4-Bromofluorobenzene	21		20.00		103	70	130			

Sample ID: **2301551-001amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **MW-5** Batch ID: **B93978** RunNo: **93978**

Prep Date: Analysis Date: **1/16/2023** SeqNo: **3393250** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	85.1	70	130	4.56	20	
Toluene	18	1.0	20.00	0	90.5	70	130	3.71	20	
Ethylbenzene	18	1.0	20.00	0	92.3	70	130	3.28	20	
Xylenes, Total	56	2.0	60.00	0	93.7	70	130	3.27	20	
Surr: 4-Bromofluorobenzene	20		20.00		102	70	130	0	0	

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBW** Batch ID: **B93978** RunNo: **93978**

Prep Date: Analysis Date: **1/16/2023** SeqNo: **3393328** 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		97.7	70	130			

Sample ID: **100NG BTEX CCV** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSW** Batch ID: **B93978** RunNo: **93978**

Prep Date: Analysis Date: **1/16/2023** SeqNo: **3393347** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.1	70	130			
Toluene	19	1.0	20.00	0	94.5	70	130			
Ethylbenzene	19	1.0	20.00	0	95.2	70	130			
Xylenes, Total	57	2.0	60.00	0	95.5	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		100	70	130			

Qualifiers:

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

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 Work Order Number: 2301551 RcptNo: 1

Received By: Sean Livingston 1/14/2023 9:20:00 AM

Completed By: Sean Livingston 1/14/2023 9:37:00 AM

Reviewed By: JH 1-16-23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: JH 1/16/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes	YOGI		

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: LD Gas Com 1E
Masden ES

Project #:

Project Manager:
K. Summers

Sampler: L. Daniell

On Ice: ☑ Yes ☐ No

# of Coolers: 1 IR: VOGI

Cooler Temp (Including CF): 1.5+0.1=1.6 °C (°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. 2301551	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)
1/13/23	10:10	W	MW-5	1402 jar	$HgCl_2$	001	X									
1/13/23	10:45	W	MW-4			002	X									
1/13/23	11:15	W	MW-3			003	X									
1/13/23	11:55	W	MW-1			004	X									
1/13/23	12:25	W	MW-2R			005	X									

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/13/23	1530			Courier	1/13/23	1336
1/13/23	1834			Courier	1/14/23	9:20

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.

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

April 21, 2023

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

RE: Madsen GasCom 1E OrderNo.: 2304723

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/18/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2304723**
Date Reported: **4/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: Madsen GasCom 1E **Collection Date:** 4/17/2023 11:00:00 AM
Lab ID: 2304723-001 **Matrix:** AQUEOUS **Received Date:** 4/18/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	4/19/2023 2:44:00 PM	BW9613
Toluene	ND	1.0		µg/L	1	4/19/2023 2:44:00 PM	BW9613
Ethylbenzene	ND	1.0		µg/L	1	4/19/2023 2:44:00 PM	BW9613
Xylenes, Total	ND	2.0		µg/L	1	4/19/2023 2:44:00 PM	BW9613
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	4/19/2023 2:44:00 PM	BW9613

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

Qualifiers:

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

Analytical Report
Lab Order **2304723**
Date Reported: **4/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-4
Project: Madsen GasCom 1E
Collection Date: 4/17/2023 11:30:00 AM
Lab ID: 2304723-002 **Matrix:** AQUEOUS **Received Date:** 4/18/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	4/19/2023 3:05:00 PM	BW9613
Toluene	ND	1.0		µg/L	1	4/19/2023 3:05:00 PM	BW9613
Ethylbenzene	ND	1.0		µg/L	1	4/19/2023 3:05:00 PM	BW9613
Xylenes, Total	ND	2.0		µg/L	1	4/19/2023 3:05:00 PM	BW9613
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	4/19/2023 3:05:00 PM	BW9613

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

Qualifiers:

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

Analytical Report
Lab Order **2304723**
Date Reported: **4/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: Madsen GasCom 1E **Collection Date:** 4/17/2023 11:50:00 AM
Lab ID: 2304723-003 **Matrix:** AQUEOUS **Received Date:** 4/18/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	4/19/2023 3:27:00 PM	BW9613
Toluene	ND	1.0		µg/L	1	4/19/2023 3:27:00 PM	BW9613
Ethylbenzene	ND	1.0		µg/L	1	4/19/2023 3:27:00 PM	BW9613
Xylenes, Total	ND	2.0		µg/L	1	4/19/2023 3:27:00 PM	BW9613
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	4/19/2023 3:27:00 PM	BW9613

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

Qualifiers:

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

Analytical Report
Lab Order **2304723**
Date Reported: **4/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1
Project: Madsen GasCom 1E **Collection Date:** 4/17/2023 12:15:00 PM
Lab ID: 2304723-004 **Matrix:** AQUEOUS **Received Date:** 4/18/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	4/19/2023 3:48:00 PM	BW9613
Toluene	ND	1.0		µg/L	1	4/19/2023 3:48:00 PM	BW9613
Ethylbenzene	ND	1.0		µg/L	1	4/19/2023 3:48:00 PM	BW9613
Xylenes, Total	ND	2.0		µg/L	1	4/19/2023 3:48:00 PM	BW9613
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	4/19/2023 3:48:00 PM	BW9613

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

Qualifiers:

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

Analytical Report
Lab Order **2304723**
Date Reported: **4/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2R
Project: Madsen GasCom 1E **Collection Date:** 4/17/2023 12:50:00 PM
Lab ID: 2304723-005 **Matrix:** AQUEOUS **Received Date:** 4/18/2023 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	4/19/2023 4:10:00 PM	BW9613
Toluene	ND	1.0		µg/L	1	4/19/2023 4:10:00 PM	BW9613
Ethylbenzene	ND	1.0		µg/L	1	4/19/2023 4:10:00 PM	BW9613
Xylenes, Total	ND	2.0		µg/L	1	4/19/2023 4:10:00 PM	BW9613
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	4/19/2023 4:10:00 PM	BW9613

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2304723**

21-Apr-23

Client: ENSOLUM

Project: Madsen GasCom 1E

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **BW96134**	RunNo: **96134**
Prep Date:	Analysis Date: **4/19/2023**	SeqNo: **3481478** 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	22	1.0	20.00	0	108	70	130			
Ethylbenzene	22	1.0	20.00	0	108	70	130			
Xylenes, Total	65	2.0	60.00	0	108	70	130			
Surr: 4-Bromofluorobenzene	19		20.00		96.4	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **BW96134**	RunNo: **96134**
Prep Date:	Analysis Date: **4/19/2023**	SeqNo: **3481479** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		94.1	70	130			

Sample ID: **2304723-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-5**	Batch ID: **BW96134**	RunNo: **96134**
Prep Date:	Analysis Date: **4/19/2023**	SeqNo: **3482567** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.6670	97.3	70	130			
Toluene	20	1.0	20.00	0	99.7	70	130			
Ethylbenzene	20	1.0	20.00	0	100	70	130			
Xylenes, Total	60	2.0	60.00	0	100	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		98.4	70	130			

Sample ID: **2304723-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-5**	Batch ID: **BW96134**	RunNo: **96134**
Prep Date:	Analysis Date: **4/19/2023**	SeqNo: **3482568** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0.6670	92.3	70	130	5.16	20	
Toluene	19	1.0	20.00	0	94.8	70	130	5.01	20	
Ethylbenzene	19	1.0	20.00	0	96.2	70	130	4.18	20	
Xylenes, Total	58	2.0	60.00	0	96.1	70	130	4.43	20	
Surr: 4-Bromofluorobenzene	19		20.00		95.8	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: ENSOLUM | Work Order Number: 2304723 | RcptNo: 1

Received By: Juan Rojas 4/18/2023 1:15:00 PM

Completed By: Joseph Alderette 4/18/2023 9:43:37 AM

Reviewed By: 4/18/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: KRA 4.18.23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Not Present	morty		

Chain-of-Custody Record

Client: Ensolum, LLC

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

Phone #:

email or Fax#: kcummings@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Masden Gas Com #1E

Project #: 05A1224126

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ~~☐ Yes~~ ☐ No

# of Coolers: 1 (Monty)

Cooler Temp (including CF): 1.5+0=1.5 (°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. 2304723	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)
4/12/23	11:00	Water	MW-5	14oz VOA	HgCl2	001	X									
4/12/23	11:30	Water	MW-4			002	X									
4/17/23	11:50	Water	MW-3			003	X									
4/17/23	12:15	Water	MW-1			004	X									
4/17/23	12:50	Water	MW-2R			005	X									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/17/23	1406				4/17/23	1400
4/17/23	1817			courier	4/18/23	7:15

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.

Enterprise Products

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

ENTERPRISE PRODUCTS OPERATING LLC

May 28, 2024

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

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

Submittal1: ***2023 Annual Groundwater Monitoring Report*** (Ensolum, May 6, 2024)
Submittal2: ***2022 Supplemental Environmental Site Investigation and Groundwater Monitoring Report*** (Ensolum, May 3, 2023)
RE: Enterprise Field Services, LLC
Lateral K-12 Y#3 Condensate Tank Release (3/19/2012)
Rio Arriba Co., NM [S23, T27N R7W] 36.554120° N, 107.549350° W
OCD RP: 3R-459; Stage 1 AP-132

Dear Mr. Velez:

Enterprise Products Operating LLC (Enterprise), on behalf of Enterprise Field Services, LLC, is pleased to submit to the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) electronic copies of the above-referenced documents (Submittal1 and Submittal2, collectively "Submittals"), prepared by Ensolum, LLC (Ensolum) and dated May 3, 2023 and May 6, 2024, respectively. The Submittals are associated with the Enterprise Lateral K-12 Y#3 release of natural gas condensate liquids that occurred on March 19, 2012 from a condensate storage tank, located in Rio Arriba County, New Mexico.

Submittal1 summarizes groundwater monitoring and sampling (GWM&S) activities that occurred between January 1, 2023 and December 31, 2023 ("reporting period" for Submittal1) and Submittal2 summarizes site investigation and GWM&S between January 1, 2022 and December 31, 2022 ("reporting period" for Submittal2). Activities completed during each reporting period were performed to further evaluate the magnitude and stability of the phase-separated hydrocarbon (PSH) and dissolved-phase hydrocarbon (DPH) plumes in groundwater. PSH fluid recovery was also initiated in October 2023 in an effort to reduce PSH and constituents of concern (COCs) concentrations at the site.

Based on the data contained in this Submittal, measurable PSH was observed in monitoring wells SVE-3 and MW-11 in December 2023 and COC concentrations continue to remain in excess of the applicable Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) in SVE-2, SVE-3, MW-2, and MW-19. The DPH plume appears delineated to the north by monitor wells MW-19, MW-22, and MW-23; however, delineation is still needed to the east and south.

Based on the findings and conclusions included in the report, Enterprise plans to: 1) continue monthly PSH recovery and semiannual GWM&S at the Site; 2) further delineate the DPH groundwater plume to the south and east; 3) plug and abandon (P&A) MW-1 as it appears to be installed in a deeper groundwater zone and not representative; 4) evaluate the potential for in-situ remediation options of source area soils; and, 5) prepare a *Stage 2 Abatement Plan* (if required) after concurrence that the *Stage 1 Abatement Plan* is deemed administratively complete.

Enterprise appreciates the New Mexico EMNRD OCD's continued assistance in bringing this Site to closure. Should you have any questions, comments or concerns, or require additional information, please contact Scott Drewry via email (sdrewry@eprod.com) or phone (713-381-5696), or our project consultant Joseph Doyle (jdoyle@ensolum.com) with Ensolum.

Sincerely,

Jon E. Fields
Director, Environmental

cc: BLM, Farmington, NM – Ms. Sherrie Landon <6251 College Blvd., Suite A, Farmington, NM 87402>
ec: NMOCD, Aztec, NM - Mr. Nelson Velez < Nelson.Velez@state.nm.us>
NMOCD, Santa Fe, NM – Mr. Jim Griswold <Jim.Griswold@state.nm.us>
NMOCD, Santa Fe, NM – Mr. Brad Billings <Bradford.Billings@state.nm.us>
Ensolum, Houston, TX – Mr. Marc E. Gentry <MGentry@ensolum.com>

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

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

ENSOLUM

2022 Supplemental Environmental Site Investigation and Groundwater Monitoring Report

Property:

Lateral K-12 Y#3 Condensate Tank Release (3/19/12)
SW ¼, S23 T27N R7W
Rio Arriba County, New Mexico

New Mexico EMNRD OCD RP No. 3RP-459, AP No. 132
Incident ID No. NJK1211037846

May 3, 2023

Ensolum Project No. 05B1226001

Prepared for:

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

Prepared by:

Ranee Deechilly
Project Manager

Marc E. Gentry, PG
Principal

Executive Summary

This report documents the 2022 supplemental environmental site investigation (SESI) and groundwater monitoring activities conducted at the Lateral K-12 Y#3 Condensate Tank Release (3/19/12) 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) 1/4 of Section 23, Township 27 North, Range 7 West, in Rio Arriba County, New Mexico (NM) on property managed by the United States Bureau of Land Management (BLM).

On March 19, 2012, a natural gas condensate release, estimated at less than one barrel (bbl), occurred as a result of overfilling of a condensate tank. During the excavation of impacted soils (April 2012), a suspected historical earthen pit was discovered, and the excavation was expanded to remove historical hydrocarbon affected soils. Due to the increased area of disturbance and safety factors associated with the depth of the excavation, the excavation activities were suspended by the BLM. Groundwater was not identified in the 35-foot below grade surface (bgs) excavation. Subsequent site investigations by Animas Environmental Services, LLC (AES) included the advancement of nine soil borings and the installation of three soil vapor extraction (SVE) wells/monitoring wells to delineate the extent of hydrocarbon affected soil and/or groundwater and provide potential "high-vacuum" remediation. As the SVE wells were not utilized for remediation purposes the SVE wells are now referred to and used as "monitoring wells." Samples collected from the soil borings and monitoring wells exhibited concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and total petroleum hydrocarbons (TPH) above NM Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria in soils and above the NM Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) in groundwater. Additionally, non-aqueous phase liquid (NAPL) was identified in monitoring well SVE-1. NAPL was removed from SVE-1 by hand bailing and did not recharge. Additional delineation activities were performed by AES during 2013 and 2014, and by Apex TITAN, Inc., (Apex) during 2016. Enterprise retained Apex to perform environmental Site investigation activities between 2016 and 2018. However, following a staffing change at Apex in February 2019, Enterprise reassigned management of the project to Ensolum, LLC (Ensolum).

In May 2019, Enterprise submitted a *Stage 1 Abatement Plan* for this Site to the NM EMNRD OCD. On October 25, 2022, the NM EMNRD OCD approved the plan.

In October 2020, Ensolum advanced four soil borings and completed three of the borings as monitoring wells (MW-18, MW-19, and MW-21). COCs were not identified in soil above the NM EMNRD OCD closure criteria. COCs were identified in groundwater above the WQCC GQSs at monitoring MW-18. In July 2022, Ensolum advanced three additional soil borings to evaluate concentrations of COCs in soil and groundwater.

Findings based on the SESI and groundwater monitoring activities are as follows:

- Three soil borings were advanced in May 2022. Nine soil samples were collected and submitted for analysis. All soil samples collected from the soil borings did not exhibit COC concentrations above the NM EMNRD OCD soil closure criteria.

- Based on available information, the first apparent water-bearing unit at the Site (at least in the vicinity of the remediation excavation) appears to be very limited in thickness and volume and may be more accurately described as subsurface water (as defined in Paragraph (6) of Subsection S of 20.6.2.7 New Mexico Administrative Code (NMAC)). The water observed in the upgradient monitoring wells (SVE-1R, SVE-2, SVE-3, and MW-5) may be limited to a small

volume of percolating water from precipitation events that periodically collects on or near the surface of the weathered subgrade bedrock and, depending on the significance of the precipitation event, may subsequently drain into the monitoring wells and the associated well bore annuli. This conceptual site model is supported by the lack of groundwater encountered in the initial 35-foot deep excavation (April 2012); an excavation depth that exceeded the measured apparent depth to groundwater at the Site of approximately 27 feet bgs near the source area. Furthermore, bail-down tests performed on monitoring wells SVE-2 and SVE-3 in 2013 demonstrated insignificant water recharge over several days.

- At the time of both groundwater sampling events, monitoring well MW-11 exhibited measurable NAPL (0.77 feet (ft) (May) and 0.02 ft (November)) in contact with groundwater and therefore this well was not sampled.

- The groundwater flow direction at the Site is generally semi-radial to the east, north, and northwest. The calculated gradient during the 2022 monitoring events varied from approximately 0.03 feet per foot (ft/ft) to 0.08 ft/ft.

- Benzene was reported at concentrations exceeding the New Mexico WQCC GQS of 10 micrograms per liter (µg/L) in groundwater samples collected from monitoring wells SVE-2, SVE-3, MW-2, and MW-18 during both 2022 sampling events. Total xylenes were reported at concentrations exceeding the New Mexico WQCC GQS of 620 µg/L in groundwater samples collected from monitoring wells SVE-2 and MW-2 during the May 2022 sampling event and monitoring wells SVE-2, SVE-3, and MW-2 during the November 2022 sampling event. The groundwater samples collected from the remaining monitoring wells during both of the 2022 sampling events did exhibit COC concentrations above the applicable WQCC GQSs (see footnote in report).

- With the exception of monitoring well MW-11, SVE-3, and MW-18, 2022 groundwater data continue to demonstrate declining or stable COC concentrations in groundwater.

Ensolum offers the following recommendations:

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

- Conduct semi-annual groundwater monitoring at the Site to further evaluate the concentration of COCs in groundwater.

- Perform additional site assessment activities to the south of monitoring well SVE-3 and replace monitoring well MW-12 to fully define the groundwater plume.

- Upon New Mexico EMNRD OCD approval, evaluate in-situ remediation options for source area soils.

- Once the Stage 1 Abatement Plan is fully implemented, prepare a Stage 2 Abatement Plan.

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LIST OF APPENDICES

1.0 INTRODUCTION

This report documents the 2022 supplemental environmental site investigation (SESI) and groundwater monitoring conducted at the Lateral K-12 Y#3 Condensate Tank Release (3/19/12) site, referred to hereinafter as the "Site".

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral K-12 Y#3 Condensate Tank Release (3/19/12)
NM EMNRD OCD Incident ID No.	NJK1211037846
Location:	36.554120° North, 107.549350° West Southwest (SW) ¼ of Section 23, Township 27 North, Range 7 West Rio Arriba 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 March 19, 2012, a natural gas condensate release, estimated at less than one barrel (bbl), occurred as a result of overfilling of a condensate tank. Animas Environmental Services, LLC (AES) conducted an initial release assessment and subsequently recommended the removal of affected soils (*Release Mitigation and Investigation Report*, AES, July 18, 2012).

During excavation in April 2012, a suspected historical earthen pit was discovered, and the excavation was expanded to remove the associated petroleum hydrocarbon affected soils. Due to the increased area of disturbance and safety factors associated with the depth of the excavation, the BLM suspended excavation activities. Confirmation soil samples (SC-1 through SC-9) were collected by AES prior to backfill of the excavation with clean imported fill. Groundwater was not identified in the 35-foot deep excavation. Subsequent to backfilling the excavation with clean fill, AES conducted a site investigation that included the advancement of seven soil borings (SB-1 through SB-7). Three of the soil borings (SB-1/SVE-1, SB-3/SVE-2, SB-4/SVE-3), were completed as soil-vapor-extraction (SVE) monitoring wells in anticipation of potential future remedial activities. However, an SVE well system was not employed and the SVE wells at the Site are now referred to and used as "monitoring wells."

On July 19, 2013, AES conducted a monitoring event of the SVE wells. Water was present in the three SVE wells and non-aqueous phase liquid (NAPL) was also present in monitoring well SVE-1 (1.07 feet thick). The NAPL was removed by hand bailing and did not recharge. AES also advanced two soil borings (SB-8 and SB-9) adjacent to the former excavation. Soil analytical data associated with soil boring SB-8 and SB-9 demonstrated minimal natural attenuation of constituent of concern (COC) concentrations since the backfilling of the excavation. On July 22, 2013, AES collected water samples from monitoring wells SVE-2 and SVE-3 for laboratory analysis of total dissolved solids (TDS) and chlorides. Laboratory analytical results indicated TDS concentrations of 1,160 milligrams per liter (mg/L) and 740 mg/L in SVE-2 and SVE-3, respectively. Chloride concentrations were 110 mg/L and 23 mg/L in SVE-2 and SVE-3, respectively (*Continued Site Investigation Report*, AES, October 4, 2013).

Based on available information, the first apparent water-bearing unit at the Site (at least in the vicinity of the remediation excavation) appears very limited in thickness and volume and may be more accurately described as subsurface water (as defined in Paragraph (6) of Subsection S of Section 20.6.2.7 New Mexico Administrative Code (NMAC)). The water observed in the

upgradient monitoring wells (SVE-1R, SVE-2, SVE-3, and MW-5) may be limited to a small volume of percolating water from precipitation events that periodically collect on or near the surface of the weathered subgrade bedrock. Depending on the significance of the precipitation events, water subsequently drains into the monitoring wells and the associated well bore annuli. This conceptual site model is supported by the lack of groundwater encountered during prior excavation activities (reaching approximately 35 feet below grade surface (bgs)) when the bottom of the excavation was below the apparent depth to groundwater at the Site (approximately 27 feet bgs near the source area). Furthermore, bail-down tests performed on monitoring wells SVE-2 and SVE-3 in 2013 demonstrated insignificant water recharge over several days.

A groundwater monitoring and sampling event was conducted by AES on October 8, 2013. NAPL was not observed in monitoring well SVE-1 during this monitoring and sampling event. However, presumably due to settling of the backfilled excavation, the screen of monitoring well SVE-1 was damaged precluding collection of a water sample. Water samples were collected from monitoring wells SVE-2 and SVE-3 for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX), and total petroleum hydrocarbons (TPH), gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) (*Groundwater Monitoring Report and Continued Site Investigation Workplan*, AES, November 15, 2013).

During January 2014, AES advanced six soil borings, five of which were completed as new groundwater monitoring wells (MW-1 through MW-5), and one replacement monitoring well (SVE-1R). Damaged monitoring well SVE-1 was apparently plugged and abandoned at that time.

During August and September 2016, Apex TITAN, Inc., (Apex) conducted supplemental site investigation activities by advancing seven soil borings to further evaluate the extent of hydrocarbon affected soil and potentially impacted groundwater. Laboratory analytical results identified TPH GRO/DRO concentrations in soil that exceeded applicable New Mexico EMNRD OCD closure criteria in samples in which monitoring wells MW-11 and MW-13 were installed. Three soil borings were completed as groundwater monitoring wells MW-11 through MW-13. The groundwater analytical results for these wells indicated benzene, toluene, and total xylenes in excess of the WQCC Groundwater Quality Standards (GQSs) (*Supplemental Environmental Site Investigation and Annual Subsurface Water Monitoring Report*, Apex, February 24, 2017).

Semi-annual groundwater sampling was conducted in 2017 and 2018 by Apex. During these sampling events five monitoring wells (SVE-1R, SVE-2, MW-2, MW-11, and MW-13) exhibited COC concentrations above the applicable WQCC GQSs (*Annual Groundwater Monitoring Report (July and December 2017 Events*, Apex, May 24, 2018; *Lateral K-12 Y#3 Condensate Tank Release (3/19/12) 2018 Annual Groundwater Monitoring Report,* Ensolum, LLC (Ensolum), September 26, 2019).

During February 2019, Enterprise assigned management of the project to Ensolum. During March 2019, Enterprise submitted a *Stage 1 Abatement Plan* for this Site to the New Mexico EMNRD OCD (*Stage 1 Abatement Plan*, Ensolum, March 21, 2019). On October 25, 2022, the New Mexico EMNRD OCD approved this plan.

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to oil and gas releases, the New Mexico EMNRD OCD references 19.15.29 NMAC and 19.15.30 NMAC, which establishes investigation and abatement action requirements for sites that are subject to reporting and/or corrective action. Additionally, the New Mexico EMNRD OCD utilizes the New Mexico WQCC GQS (20.6.2 NMAC *Ground and Surface Water Protection*) to evaluate groundwater conditions.[1]

[1] 20.6.2 NMAC was amended (12/21/18). This document reflects the GQSs indicated in the approved Stage 1 Abatement Plan.

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**, based on 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 SESI and groundwater monitoring events was to further define the extent of petroleum hydrocarbon impact to soil and groundwater and to further evaluate groundwater quality and monitor COC concentration trends over time at the Site.

2.0 SUPPLEMENTAL ENVIRONMENTAL SITE INVESTIGATION (JULY 2022)

During July 2022, SESI activities were initiated at the Site. Prior to drilling activities, the soil boring locations were “daylighted” to approximately eight feet bgs utilizing a hydro-excavation vacuum truck. Three soil borings were advanced at the Site by Ensolum. The soil boring/well boring locations were advanced utilizing a hollow-stem auger (HSA) drilling rig. **Figure 4** (**Appendix A**) identifies the approximate soil boring/well sample locations. Regulatory correspondence is provided in **Appendix B**.

2.1 Soil Boring Installation

Soil samples were collected continuously utilizing standard split-spoon samplers. Samples and were screened for visual and olfactory evidence of petroleum hydrocarbon impact. A field soil headspace analysis was conducted on each available soil sample interval by placing a representative portion of the sample into a plastic Ziploc® bag. The plastic bag was sealed, and the sample allowed to volatilize. The air above the sample, the headspace, was then evaluated using a photoionization detector (PID) capable of detecting volatile organic compounds (VOCs). The PID was calibrated utilizing an isobutylene standard prior to use in the field. PID readings of headspace from samples collected from the soil borings ranged from zero parts per million by volume (ppmv) to 1,184 ppmv (SB-22/MW-22 (31’-32’)). The field screening results are presented on soil boring logs included in **Appendix C**.

During the completion of each soil boring, an Ensolum professional documented the subsurface lithology, indication of impairment, color, and moisture content. A continuous profile of the soil column encountered from the ground surface to the boring terminus was prepared. Soil samples from each boring location were visually inspected and classified in general accordance with the Unified Soil Classification System (USCS). The lithologies observed during the advancement of soil borings generally consisted of silt, sand, silty clay, and silty sand underlain by sandstone. Detailed lithologic descriptions are presented on the soil boring logs included in **Appendix C**.

Three soil samples were collected for laboratory analysis from each soil boring. Samples were selected for analysis based on the following:

- The depth interval exhibiting the highest concentration of VOCs based on PID evidence;
- An interval exhibiting visual/olfactory evidence of impairment;
- The capillary fringe zone;
- From a change in lithology; or,
- From the bottom of the boring

All soil samples were collected and placed in laboratory-prepared glassware. The containers were labeled and sealed using the laboratory-supplied labels and custody seals and were stored on ice

in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico, under proper chain-of-custody procedures.

2.2 Soil Laboratory Analytical Methods

The soil samples collected during the SESI activities were analyzed for TPH GRO/DRO/MRO utilizing United States (U.S.) Environmental Protection Agency (EPA) SW-846 Method# 8015; BTEX utilizing U.S. EPA SW-846 Method #8021 or #8260; and chloride utilizing U.S. EPA Method #300.0.

A summary of the analytes, sample type, and U.S. EPA or other approved methods is presented in the following table:

Analytes	Sample Type	No. of Samples	Method
BTEX	Soil	9	SW-846 8021/8260
TPH GRO/DRO/MRO	Soil	9	SW-846 8015
Chlorides	Soil	9	Method 300.0

The soil analytical results for the SESI are included in **Table 1** (**Appendix D**) and depicted on **Figure 4** (**Appendix A**). The executed chain-of-custody forms and laboratory data sheets for the SESI are provided in **Appendix E**.

2.3 Monitoring Well Installation

All these soil borings were completed as two-inch permanent groundwater monitoring wells. The monitoring wells were completed using the following methodology:

- Installation of 15 feet of two-inch diameter, 0.010-inch machine-slotted polyvinyl chloride (PVC) well screen with a threaded bottom cap;
- Installation of two-inch inside diameter, threaded flush joint PVC riser pipe to above the ground surface;
- Addition of pre-sieved, 10/20 grade, annular silica sand pack from the bottom of the soil boring to one to three feet above the top of the well screen;
- Placement of two or more feet of hydrated bentonite pellets above the sand pack;
- Addition of cement/bentonite slurry to the surface; and,
- Installation of an above-grade, steel-protective riser with an integrated padlock hasp.

The well completion details are presented on the soil boring logs included in **Appendix C**. The monitoring wells were permitted and approved by the New Mexico OSE. Copies of the approved permits are provided in **Appendix F**.

2.4 Soil Data Evaluation

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with soil samples collected from SB-22/MW-22 through SB-24/MW-24 to the New Mexico EMNRD OCD closure criteria. All soil analytical data (both current and historical) collected to date is presented in **Table 1** (**Appendix D**).

- The laboratory analytical results for all soil samples collected from the borings indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg.

- The laboratory analytical results for all soil samples collected from the borings indicate that total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.

- The laboratory analytical result for soil sample SB-23/MW-23 (35'-37') indicates a total combined TPH GRO/DRO/MRO concentration of 16 mg/kg, which is below the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for all other soil samples collected from the borings indicate total combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for soil samples SB-23/MW-23 (15'-16') and SB-24/MW-24 (15'-16') indicate chloride concentrations of 88 mg/kg and 62 mg/kg, respectively, which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg. The laboratory analytical results for all other soil samples collected from the borings indicate chloride is not present at a concentration greater than the laboratory PQL/RL, which is less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg.

3.0 GROUNDWATER MONITORING

During 2022, groundwater monitoring events were conducted during May and November. Ensolum's groundwater sampling program consisted of the collection of one groundwater sample from each monitoring well at the Site. During both sampling events in 2022, monitoring wells MW-3 and MW-4 were dry, and MW-5 and MW-21 had insufficient water column to allow collection of samples. Due to safety concerns regarding the stability of the eroding bank of the surface wash adjacent to MW-12, this well was not sampled during the May sampling event. As heavy rain events between August and October resulted in the bank collapsing and destroying monitoring well MW-12, this well was not sampled during November 2022.

Ensolum's groundwater sampling program consisted of the following:

- Ensolum gauged the depth to fluids in each monitoring well using an interface probe capable of detecting NAPL. During both 2022 sampling events, monitoring well MW-11 exhibited a measurable thickness of NAPL and was not sampled.

- The monitoring wells were sampled utilizing micro-purge, low-flow sampling techniques. Following the completion of the micro-purge process, one groundwater sample was collected from each monitoring well.

- Low-flow or low-stress sampling refers to sampling methods that are intended to minimize the stress that is imparted to the formation pore water in the vicinity of the well screen. Water level drawdown provides the best indication of the stress that is imparted by a given flow rate for a given hydrological situation. Pumping rates of 0.1 to 0.5 liters per minute (L/min) are typically maintained during the low-flow/low-stress sampling activities, using dedicated or decontaminated sampling equipment.

- During low-flow sampling, the groundwater samples are collected from each monitoring well once produced groundwater is consistent in color, clarity, pH, temperature, and conductivity.

Measurements are typically observed every three to five minutes while purging. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for at least three consecutive readings.

- Groundwater samples were collected in laboratory-supplied containers (pre-preserved with mercuric chloride ($HgCl_2$)), labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for HEAL of Albuquerque, New Mexico under proper chain-of-custody procedures.

3.1 Groundwater Laboratory Analytical Methods

The groundwater samples collected from the monitoring wells were analyzed for BTEX utilizing U.S. EPA Method SW-846 #8021 or #8260.

A summary of the analyte, sample type, number of samples, and U.S. EPA-approved methods is presented in the following table:

Analyte	Sample Type	No. of Samples	Methods
BTEX	Water	19	SW-846 8021/8260

The analytical results for the groundwater monitoring events are included in **Table 2** (**Appendix D**). The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix E**.

3.2 Groundwater Flow Direction

The groundwater flow direction at the Site is generally semi-radial toward the east, north, and northwest. The calculated gradient during the 2022 monitoring events varied from approximately 0.03 feet per foot (ft/ft) to 0.08 ft/ft across the Site. Groundwater elevation data collected during the 2022 gauging events are presented in **Table 3** (**Appendix D**). Groundwater gradient maps prepared from these data are included as **Figure 5A** and **5B** (**Appendix A**).

3.3 Groundwater Data Evaluation

Ensolum compared the BTEX laboratory analytical results or laboratory PQLs / RLs associated with the groundwater samples collected from monitoring wells during the 2022 groundwater sampling events to the New Mexico WQCC GQSs. The results of the analyses are summarized in **Table 2** of **Appendix D**. Groundwater analytical data maps are provided as **Figures 6A** and **6B** of **Appendix A**.

May 2022

- Due to the presence of NAPL in contact with groundwater, monitoring well MW-11 was not sampled and is not part of the following discussion.

- The analytical results for monitoring wells SVE-2, SVE-3, MW-2, and MW-18 indicate benzene concentrations ranging from 43 micrograms per liter (µg/L) (SVE-3) to 1,800 µg/L (MW-2), 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]

[1] 20.6.2 NMAC was amended (12/21/18). This document reflects the GQSs indicated in the approved Stage 1 Abatement Plan.

- The analytical results for monitoring wells SVE-3 and MW-18 indicate toluene concentrations of 140 µg/L and 6.2 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 toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC GQS of 750 µg/L.[1]

- The analytical results for monitoring wells SVE-2, SVE-3, MW-2, and MW-18 indicate ethylbenzene concentrations ranging from 150 µg/L (SVE-3) to 200 µg/L (MW-2), 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]

- The analytical results for monitoring wells SVE-2 and MW-2 indicate total xylenes concentrations of 1,400 µg/L and 1,200 µg/L, respectively, which exceed the WQCC GQS of 620 µg/L.[1] The analytical results for monitoring wells SVE-3 and MW-18 indicate total xylenes concentrations of 380 µg/L and 240 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 May 2022 analytical results.

November 2022

- Due to the presence of NAPL in contact with groundwater, monitoring well MW-11 was not sampled and is not part of the following discussion.

- The analytical results for monitoring wells SVE-2, SVE-3, MW-2, and MW-18 indicate benzene concentrations ranging from 140 µg/L (SVE-3) to 1,400 µg/L (MW-18), which exceed the WQCC GQS of 10 µg/L.[1] The analytical result for monitoring well MW-22 indicates a benzene concentration of 3.0 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 analytical results for monitoring wells SVE-1R, SVE-3, and MW-18 indicate toluene concentration ranging from 1.6 µg/L (SVE-1R) to 560 µg/L (SVE-3) , 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 analytical results for monitoring wells SVE-1R, SVE-2, SVE-3, MW-2, MW-18, and MW-22 indicate ethylbenzene concentrations ranging from 3.7 µg/L (SVE-1R) to 290 µg/L (SVE-3), which are below the WQCC GQS of 750 µg/L.[1] The analytical result 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 analytical results for monitoring wells SVE-2, SVE-3, and MW-2 indicate total xylenes concentrations of 1,900 µg/L, 1,800 µg/L, and 1,800 µg/L, respectively, which exceed the WQCC GQS of 620 µg/L.[1] The analytical results for monitoring wells SVE-1R, MW-18, and MW-22 indicate total xylenes concentrations of 25 µg/L, 270 µg/L, and 20 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,

[1] 20.6.2 NMAC was amended (12/21/18). This document reflects the GQSs indicated in the approved Stage 1 Abatement Plan.

which are below the WQCC GQS of 620 µg/L.[1]

- No data qualifier flags are associated with the November 2022 analytical results.

4.0 FINDINGS

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

- Three soil borings were advanced in July 2022. Nine soil samples were collected and submitted for analysis. All soil samples collected from the soil borings did not exhibit COC concentrations above the New Mexico EMNRD OCD soil closure criteria.

- Based on available information, the first apparent water-bearing unit at the Site (at least in the vicinity of the remediation excavation) appears to be very limited in thickness and volume and may be more accurately described as subsurface water (as defined in Paragraph (6) of Subsection S of Section 20.6.2.7 NMAC). The water observed in the upgradient monitoring wells (SVE-1R, SVE-2, SVE-3, and MW-5) may be limited to a small volume of percolating water from precipitation events that periodically collects on or near the surface of the weathered subgrade bedrock and, depending on the significance of the precipitation event, may subsequently drains into the monitoring wells and the associated well bore annuli. This conceptual site model is supported by the lack of groundwater encountered in the initial 35-foot deep excavation (April 2012); an excavation depth that exceeded the measured apparent depth to groundwater at the Site of approximately 27 feet bgs near the source area. Furthermore, bail-down tests performed on monitoring wells SVE-2 and SVE-3 in 2013 demonstrated insignificant water recharge over several days.

- At the time of both groundwater sampling events, monitoring well MW-11 exhibited measurable NAPL (0.77 ft (May) and 0.02 ft (November)) in contact with groundwater and therefore this well was not sampled.

- The groundwater flow direction at the Site is generally semi-radial toward the east, north, and northwest. The calculated gradient during the 2022 monitoring events varied from approximately 0.03 ft/ft to 0.08 ft/ft across the Site.

- Benzene was reported at concentrations exceeding the New Mexico WQCC GQS of 10 µg/L in groundwater samples collected from monitoring wells SVE-2, SVE-3, MW-2, and MW-18 during both 2022 sampling events. Total xylenes were reported at concentrations exceeding the New Mexico WQCC GQS of 620 µg/L in groundwater samples collected from monitoring wells SVE-2 and MW-2 during the May 2022 sampling event and monitoring wells SVE-2, SVE-3, and MW-2 during the November 2022 sampling event. The groundwater samples collected from the remaining monitoring wells during both of the 2022 sampling events did not exhibit COC concentrations above the applicable WQCC GQSs.[1]

- With the exception of monitoring well MW-11, SVE-3, and MW-18, 2022 groundwater data continue to demonstrate declining or stable COC concentrations in groundwater.

[1] 20.6.2 NMAC was amended (12/21/18). This document reflects the GQSs indicated in the approved Stage 1 Abatement Plan.

5.0 RECOMMENDATIONS

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

- Report the SESI and groundwater monitoring results to the New Mexico EMNRD OCD.
- Conduct semi-annual groundwater monitoring at the Site to further evaluate the concentration of COCs in groundwater.
- Perform additional site assessment activities to the south of monitoring well SVE-3 and replace monitoring well MW-12 to fully define the groundwater plume.
- Upon New Mexico EMNRD OCD approval, evaluate in-situ remediation options for source area soils.
- Once the Stage 1 Abatement Plan is fully implemented, prepare a Stage 2 Abatement Plan.

6.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

6.1 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).

6.2 Limitations

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

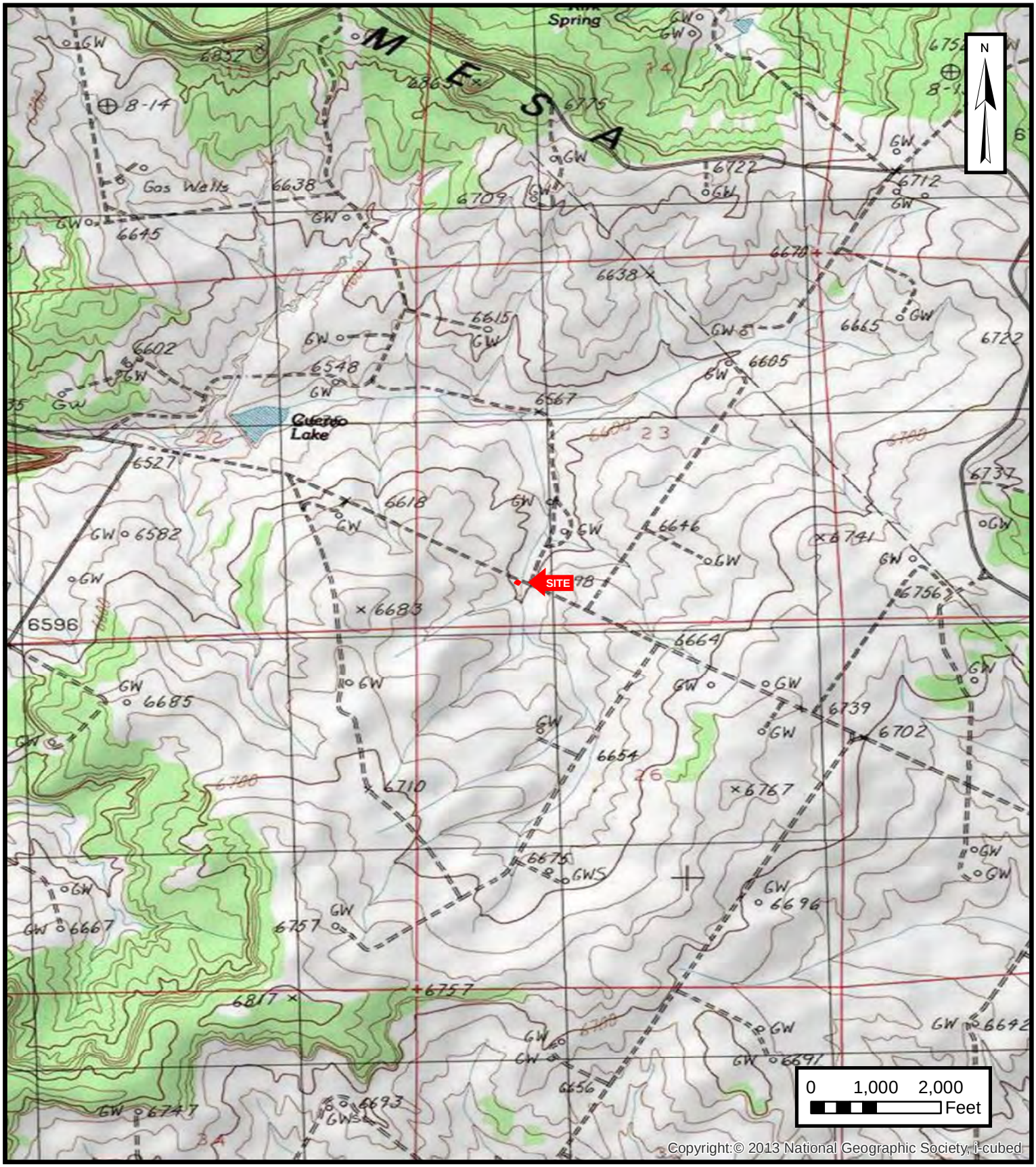
6.3 Reliance

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

ENSOLUM

APPENDIX A

Figures



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

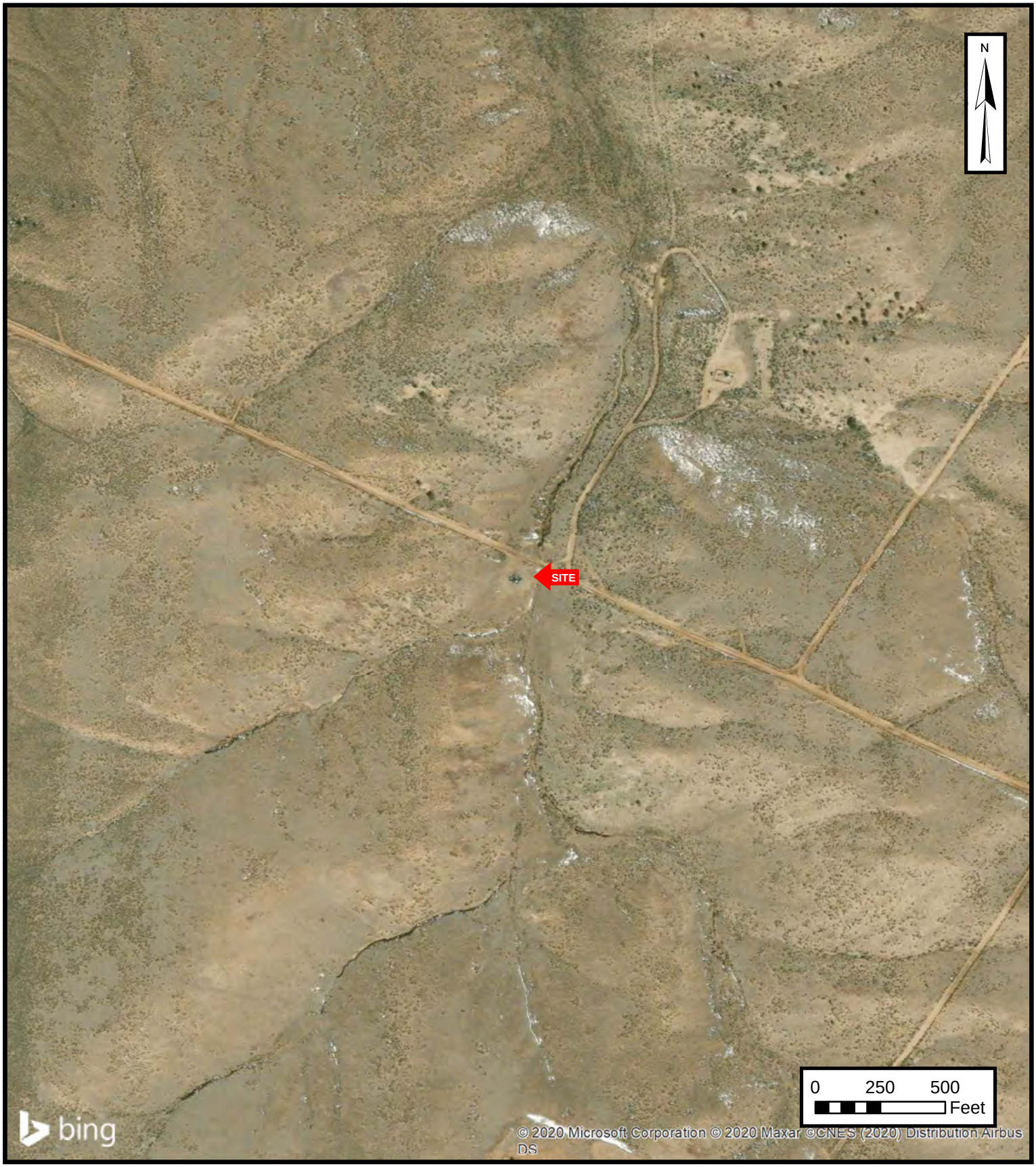
TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE
SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

PROJECT NUMBER: 05B1226001

FIGURE

1



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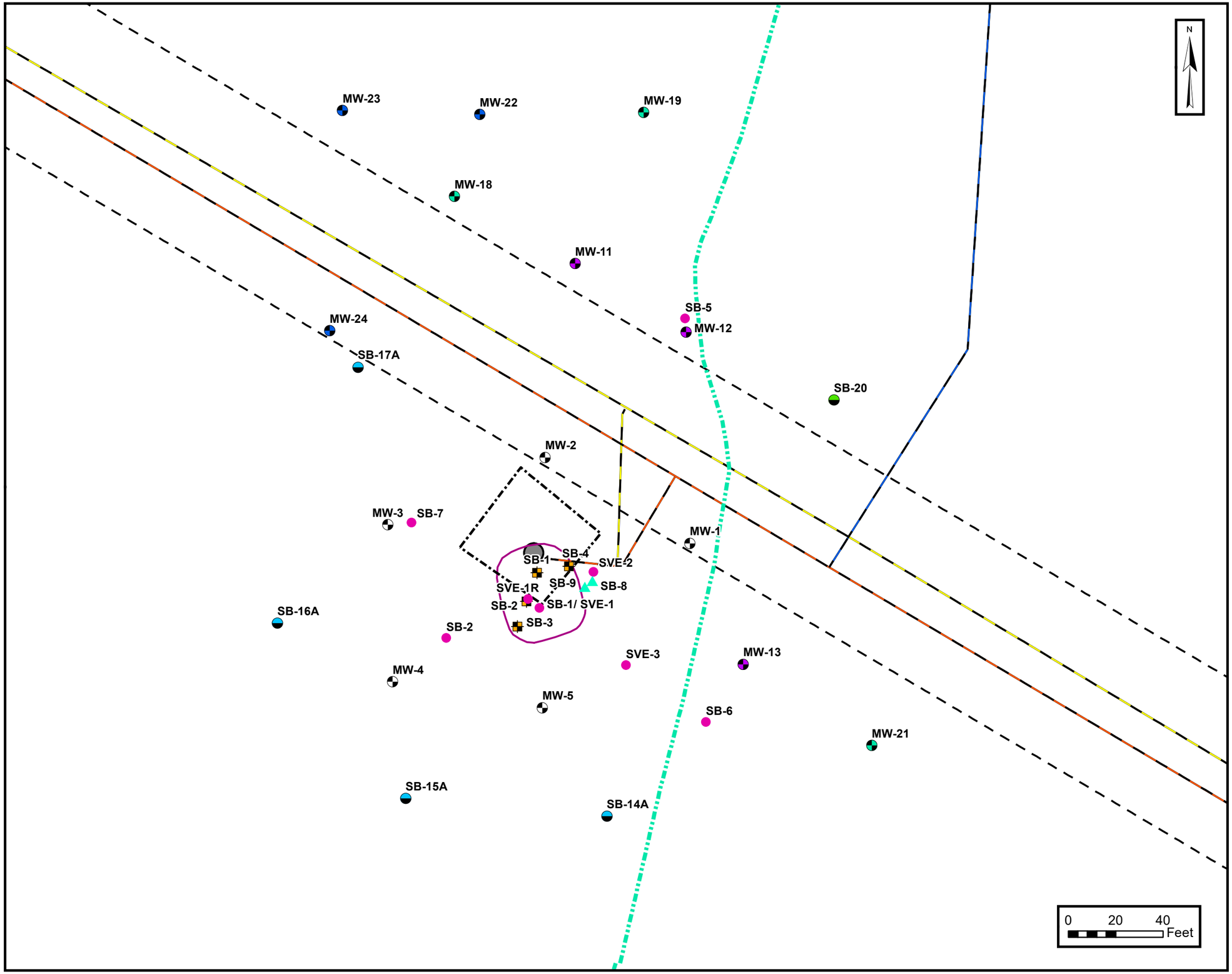
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE
SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

PROJECT NUMBER: 05B1226001

FIGURE

2



LEGEND:

- Monitoring Well Location (Ensolum, July 2022)
- Monitoring Well Location (Ensolum, October 2020)
- Monitoring Well Location (Apex, August 2016)
- Monitoring Well Location (AES, January 2014)
- Soil Boring Location (Ensolum, October 2020)
- Soil Boring Location (Apex, August & September 2016)
- Soil Boring Location (AES, June 2013)
- Soil Boring Location (AES, March 2012)
- Soil Boring Location (AES, April 2012)
- Tank
- Fence
- Surface Wash
- 2012 Main Excavation Extent
- Estimated Pipeline Right-of-Way Boundary
- Lateral K-12 Pipeline Location
- Lateral K-12 Loop Pipeline
- X70651 Well Tie Pipeline Location

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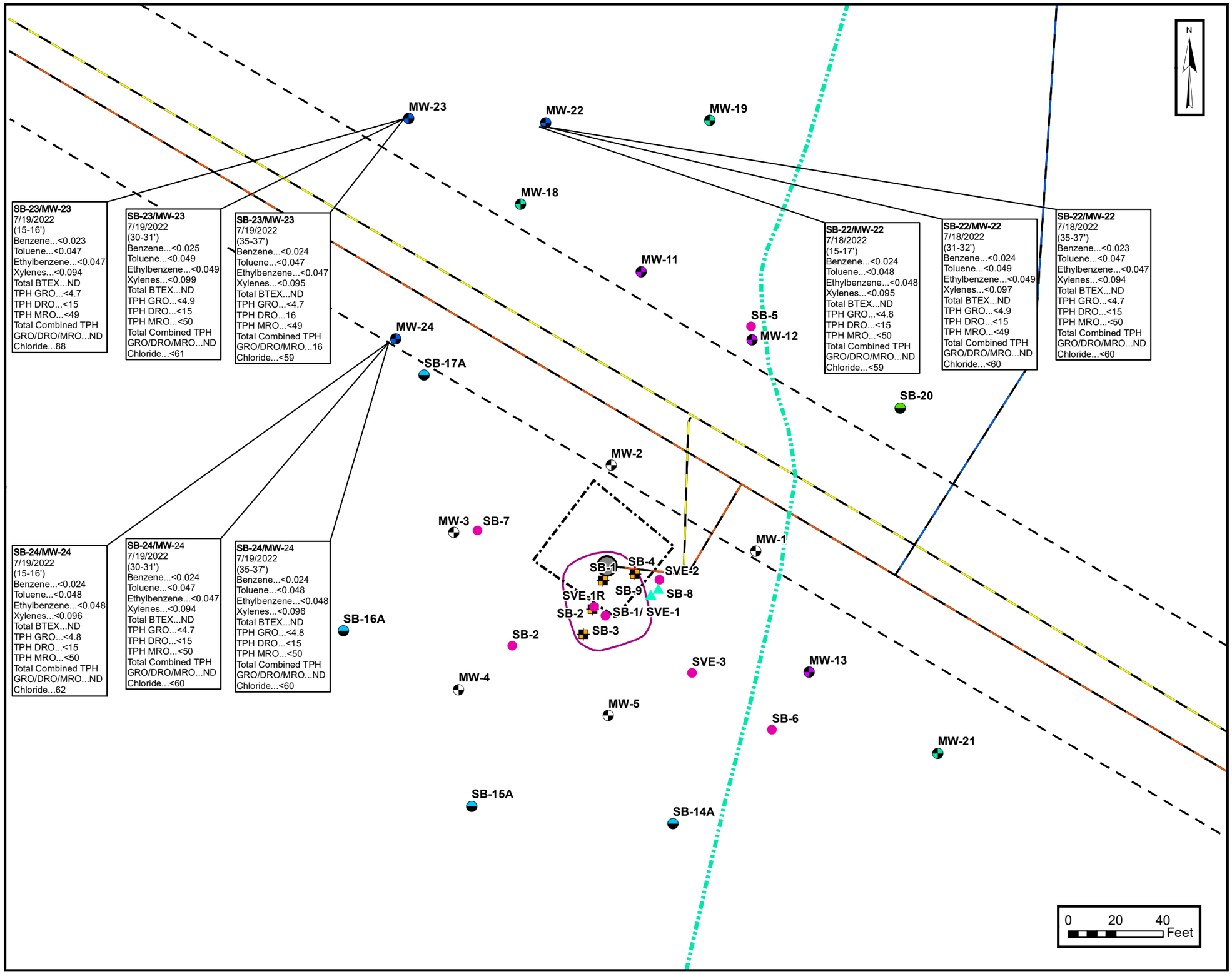
SITE MAP

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE

SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

FIGURE
3

PROJECT NUMBER: 05A1226001



LEGEND:

- Monitoring Well Location (Ensolum, July 2022)
- Monitoring Well Location (Ensolum, October 2020)
- Monitoring Well Location (Apex, August 2016)
- Monitoring Well Location (AES, January 2014)
- Soil Boring Location (Ensolum, October 2020)
- Soil Boring Location (Apex, August & September 2016)
- Soil Boring Location (AES, June 2013)
- Soil Boring Location (AES, March 2012)
- Soil Boring Location (AES, April 2012)
- Tank
- Fence
- Surface Wash
- 2012 Main Excavation Extent
- Estimated Pipeline Right-of-Way Boundary
- Lateral K-12 Pipeline Location
- Lateral K-12 Loop Pipeline
- X70651 Well Tie Pipeline Location

NOTE:
All concentrations are listed in mg/kg.
All depths are listed in feet BGS.

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Environmental, Engineering and Hydrogeologic Consultants

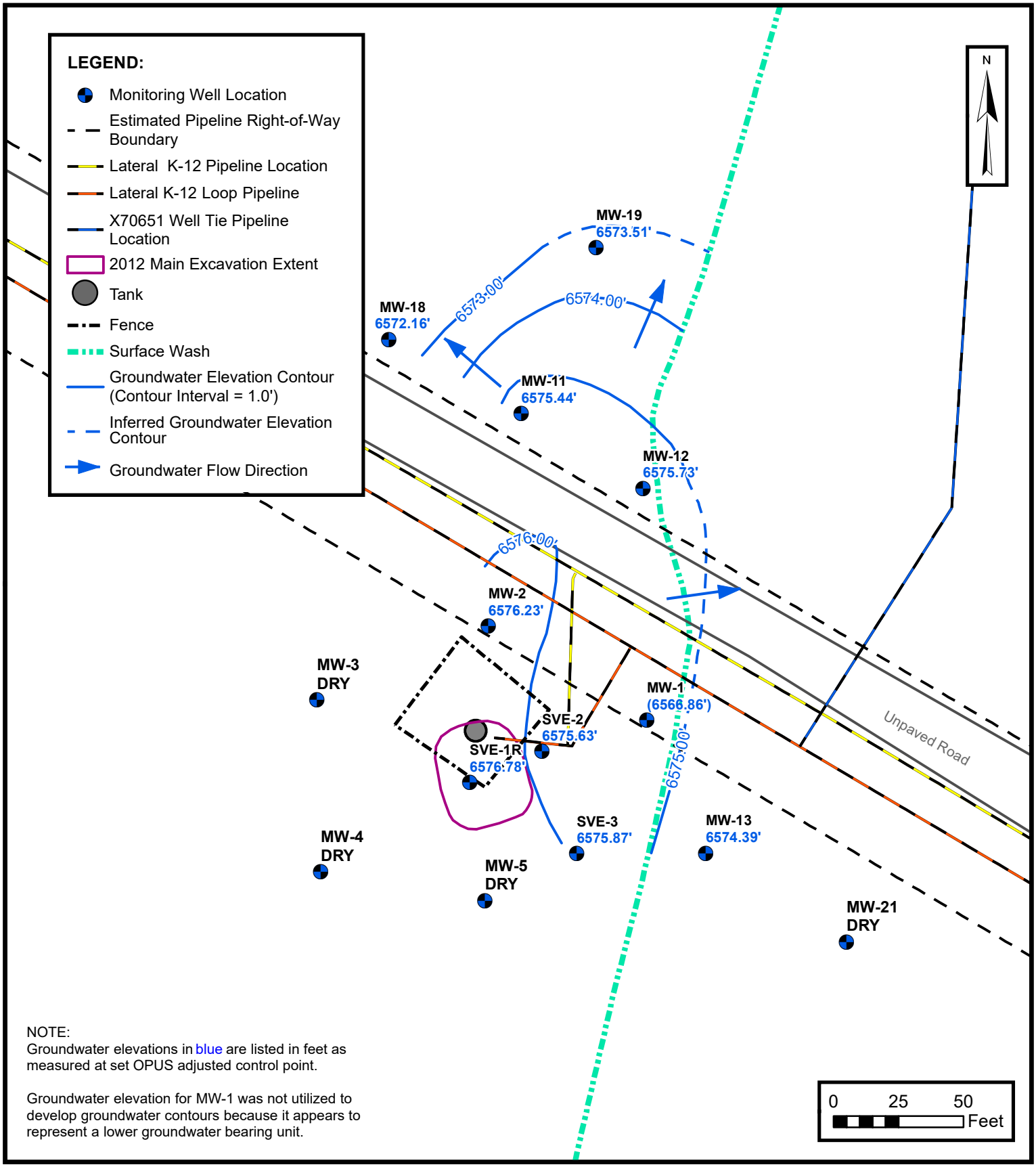
2022 SOIL BORING/MONITORING WELL LOCATIONS WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE

SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

FIGURE
4

PROJECT NUMBER: 05B1226001



NOTE:
Groundwater elevations in blue are listed in feet as measured at set OPUS adjusted control point.

Groundwater elevation for MW-1 was not utilized to develop groundwater contours because it appears to represent a lower groundwater bearing unit.

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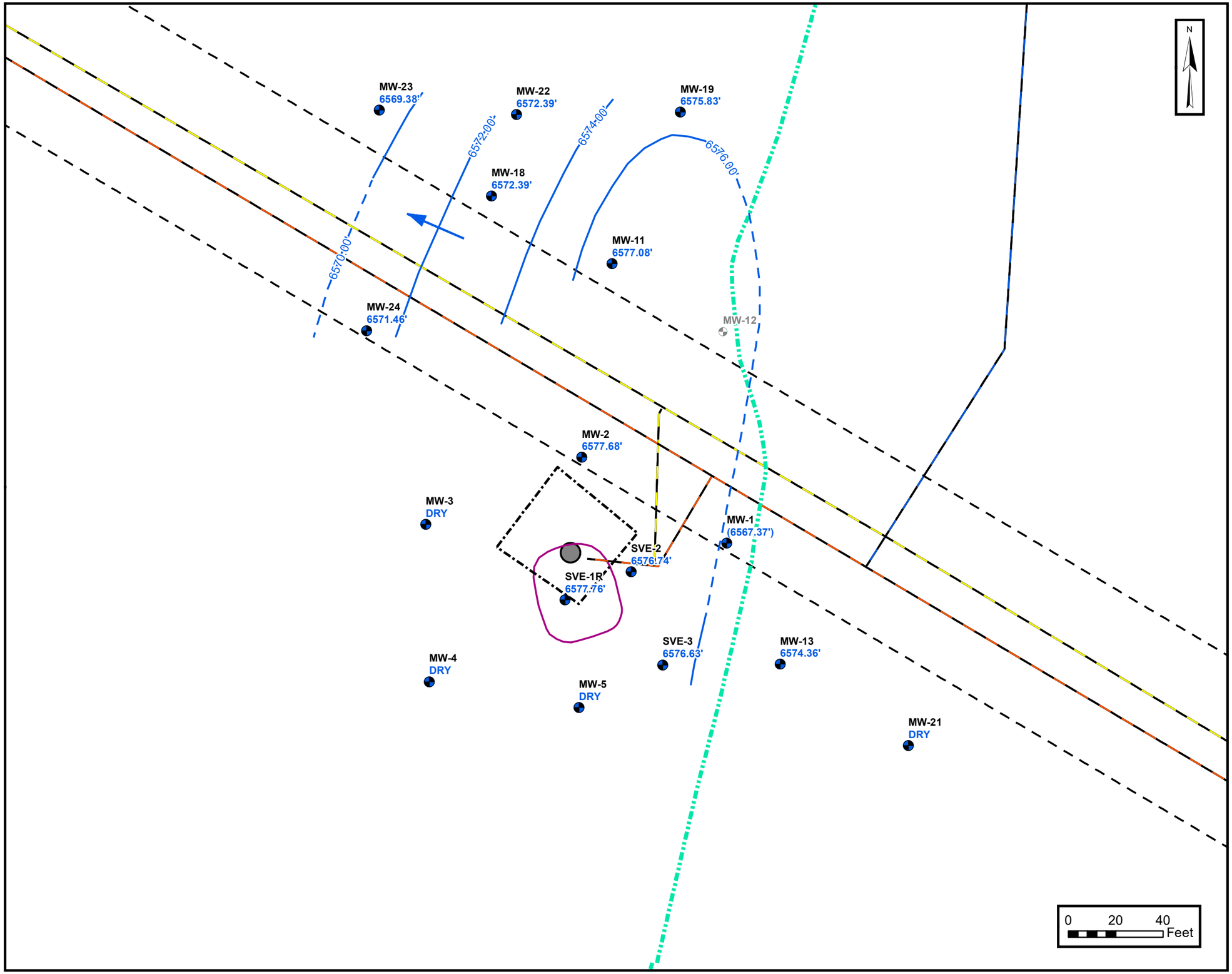
GROUNDWATER GRADIENT MAP
(MAY 2022)

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE
SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

PROJECT NUMBER: 05B1226001

FIGURE
5A



LEGEND:

- Monitoring Well Location
- Monitoring Well Location (Destroyed)
- Tank
- Fence
- Surface Wash
- 2012 Main Excavation Extent
- Estimated Pipeline Right-of-Way Boundary
- Lateral K-12 Pipeline Location
- Lateral K-12 Loop Pipeline
- X70651 Well Tie Pipeline Location
- Groundwater Elevation Contour (Contour Interval = 2.0')
- Inferred Groundwater Elevation Contour
- Groundwater Flow Direction

NOTES:
Groundwater elevations in blue are listed in feet as measured at set OPUS adjusted control point.

Groundwater elevation for MW-1 was not utilized to develop groundwater contours because it appears to represent a lower groundwater bearing unit.

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

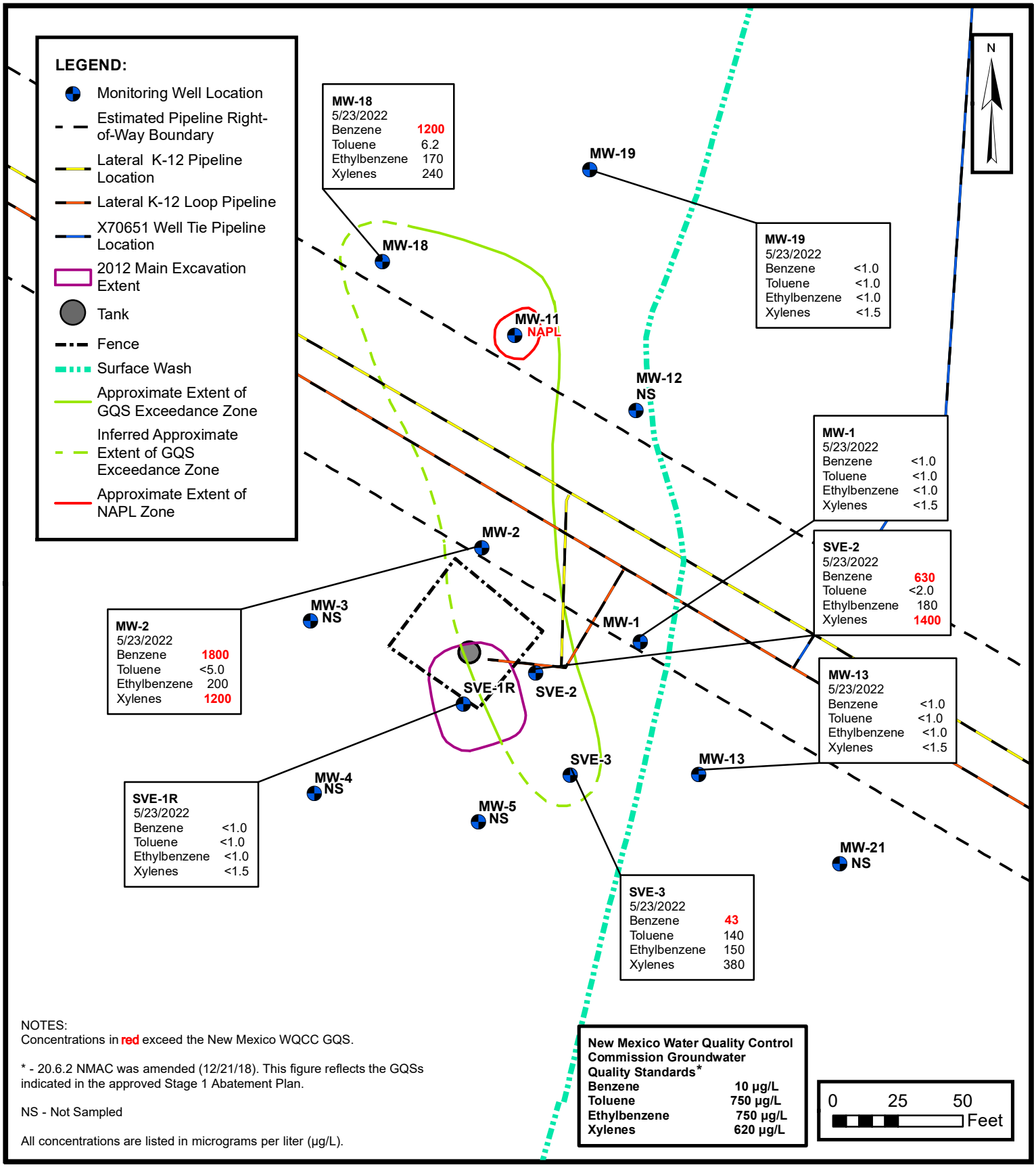
GROUNDWATER GRADIENT MAP (NOVEMBER 2022)

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE

SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

FIGURE
5B

PROJECT NUMBER: 05A1226001



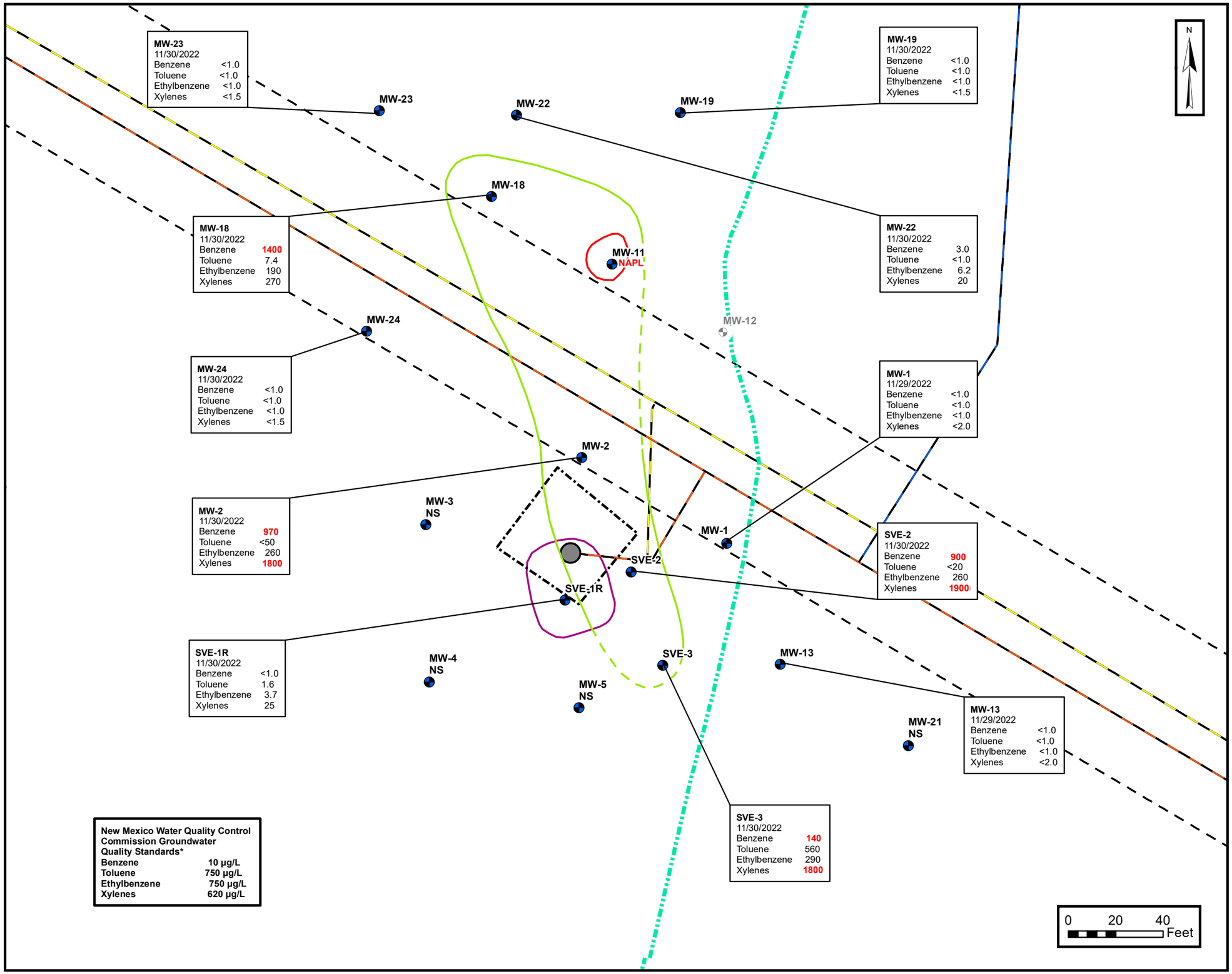
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER ANALYTICAL DATA MAP (MAY 2022)

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE
SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

PROJECT NUMBER: 05B1226001

FIGURE
6A



NOTES:
Concentrations in **red** exceed the New Mexico WQCC GQS.

* - 20.6.2 NMAC was amended (12/21/18). This figure reflects the GQSs indicated in the approved Stage 1 Abatement Plan.

NS - Not Sampled

All concentrations are listed in micrograms per liter (µg/L).

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER ANALYTICAL DATA MAP (NOVEMBER 2022)

ENTERPRISE FIELD SERVICES, LLC
K-12 Y#3 CONDENSATE TANK RELEASE

SW ¼, S23 T27N R7W, Rio Arriba County, New Mexico
36.55412° N, 107.54935° W

FIGURE
6B

PROJECT NUMBER: 05A1226001

ENSOLUM

APPENDIX B

Regulatory Correspondence

From: Long, Thomas
To: "Velez, Nelson, EMNRD"; rjoyner@blm.gov
Cc: Stone, Brian; Miller, Greg; "Marc Gentry"
Subject: FW: Lateral K-12 Y#3 (March 2012) Release Site - 3RP#459 - Section 23 T27N R7W; 36.554120, -107.549350
Date: Wednesday, May 18, 2022 7:13:00 AM

Nelson,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities for the Latera K-12 Y#3 tank (March 2012, 3RP#459) release site to begin Monday May, 23, 2022. Sampling activities are anticipated to take two days . If you have any questions, please call or email.

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

Enterprise Products

From: Long, Thomas
Sent: Monday, November 22, 2021 10:11 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; rjoyner@blm.gov
Cc: Miller, Greg <GEMiller@eprod.com>; Stone, Brian <bmstone@eprod.com>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>
Subject: Lateral K-12 Y#3 (March 2012) Release Site - 3RP#459 - Section 23 T27N R7W; 36.554120, -107.549350

Cory/Ryan,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities at the Lateral K-12 Y#3 (March 2012, 3RP#459) release site to begin Monday, 29, 2021. Sampling activities are anticipated to take two days . If you have any questions, please call or email.

Sincerely,

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.

Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Kyle Summers
To: Ranee Deechilly; Landon Daniell
Subject: FW: [EXTERNAL] Lateral K-12 Y#3 GWA Condensate Tank Site; Incident # NJK1211037846
Date: Monday, November 28, 2022 9:29:24 AM
Attachments: image004.png
image005.png
image006.png

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

PLEASE NOTE OUR NEW CORPORATE ADDRESS:
Ensolum, LLC
8330 LBJ Freeway, Ste. 830
Dallas, TX 75243

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, November 28, 2022 9:28 AM
To: Long, Thomas <tjlong@eprod.com>; Ryan Joyner <rjoyner@blm.gov>
Cc: Marc Gentry <mgentry@ensolum.com>; Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Lateral K-12 Y#3 GWA Condensate Tank Site; Incident # NJK1211037846

[**EXTERNAL EMAIL**]

Tom,

Thank you for the notice. Your indirect variance request specifically addressing 19.15.30.14B NMAC is approved.

B. A responsible person shall provide the director, or director's representative, with at least four working days advance notice of sampling to be performed pursuant to an abatement plan, or a well plugging, abandonment or destruction at a facility where the division has required an abatement plan.

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

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

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, notifications for sampling or drilling event(s), and request for time extension(s) or variance(s).

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

Thanks again

Regards,

Nelson Velez ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov *NOTE NEW EMAIL ADDRESS*
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, November 28, 2022 9:07 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Ryan Joyner <rjoyner@blm.gov>
Cc: Marc Gentry <mgentry@ensolum.com>; Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Lateral K-12 Y#3 GWA Condensate Tank Site; Incident # NJK1211037846

Nelson/Ryan,

This email is a notification that Enterprise will be conducting groundwater monitoring and sampling activities at the Lateral K-12 Y#3 Tank Site beginning tomorrow November 29, 2022. Sampling activities are anticipated to take one day. If you have any questions, please call or email.

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

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Monday, July 18, 2022 7:58 AM

To: Long, Thomas <tjlong@eprod.com>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>; Marc Gentry <mgentry@ensolum.com>; Kyle Summers <ksummers@ensolum.com>; Miller, Greg <GEMiller@eprod.com>
Subject: RE: [EXTERNAL] Lateral K-12 Y#3 GWA Condensate Tank Site; Incident # NJK1211037846

[Use caution with links/attachments]
Tom,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Regards

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Friday, July 15, 2022 7:34 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; rjoyner@blm.gov
Cc: Stone, Brian <bmstone@eprod.com>; Marc Gentry <mgentry@ensolum.com>; Kyle Summers <ksummers@ensolum.com>; Miller, Greg <GEMiller@eprod.com>
Subject: [EXTERNAL] Lateral K-12 Y#3 GWA Condensate Tank Site; Incident # NJK1211037846

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

This email is a notification that Enterprise will be installing soil borings and groundwater monitoring wells at the Lateral K-12 Y#3 GWA site beginning Monday July 18, 2022. The site is located in Section 23 T27N R7W; 36.55412, -107.54935. Four groundwater monitoring wells will be installed. Field work is anticipated to take three days. Soil samples will be collected from each soil boring while it is being advanced. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.

Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

ENSOLUM

APPENDIX C

2022 Soil Boring/Well Boring Logs

BORING LOG SB-22/MW-22

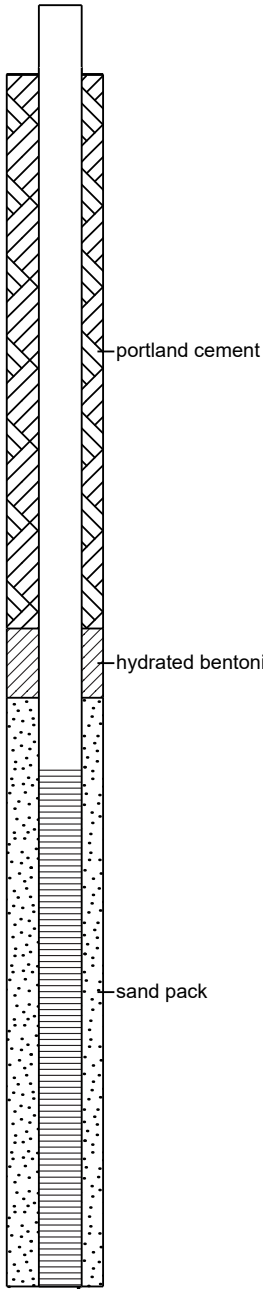
PROJECT NUMBER 05B1226001
PROJECT NAME Lateral K-12 Y#3
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

DRILLING DATE 7/18/22
DRILLING COMPANY Enviro-Drill
BORING METHOD HSA - Split Spoon
TOTAL DEPTH 37 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.554625 N
WEST COORDINATE 107.549518 W
SURFACE COMPLETION Above Grade Vault
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes:

Depth (ft)	PID (ppmv)	Samples	Recovery (%)	Water	Graphic Log	Material Description
-2						
0						**0'-10' Hydro-excavation**
2						
4						
6						
8						
10						
12						
14						**15'-37' HSA**
16	0	SB-22/MW-22 (15'-17')				Silty Sand: trace of clay at 16'bgs, moderate yellowish brown (10YR 5/4), dry, fine to medium grained sand, no hydrocarbon odor, minor oxidation from 19'-25'
18	0					17.5-22' - moderate yellowish brown (10YR 5/4) to pale yellowish brown (10YR 6/2) and dark yellowish brown (10YR 2/2)
20	0					
22	0					
24	0					24'-26' - pale yellowish brown (10YR 6/2) to dark yellowish brown (10YR 4/2), some light olive brown (5Y 5/6) at 25', consolidated at 26'
26	0					
28	2.8					Sandstone: fine grained 27'-28' - moderate yellowish brown (10YR 5/4) to pale yellowish brown (10YR 6/2), slightly moist, no hydrocarbon odor
30						
32	1,184	SB-22/MW-22 (31'-32')				31'-32' - light olive gray (5Y 5/2) with some dark greenish gray (5G 4/1), slightly moist, moderate hydrocarbon odor
34						
36	12.2	SB-22/MW-22 (35'-37')				35'-37' - dark yellowish brown (10YR 4/2) to light olive gray (5Y 5/2), minor oxidation, slightly moist, no hydrocarbon odor
38						TD at 37 ft bgs



Disclaimer This bore log should not be used separately from this report..

BORING LOG SB-23/MW-23

PROJECT NUMBER 05B1226001
PROJECT NAME Lateral K-12 Y#3
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

DRILLING DATE 7/19/22
DRILLING COMPANY Enviro-Drill
BORING METHOD HSA - Split Spoon
TOTAL DEPTH 37 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.554614 N
WEST COORDINATE 107.549738 W
SURFACE COMPLETION Above Grade Vault
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes:

Depth (ft)	PID (ppmv)	Samples	Recovery (%)	Water	Graphic Log	Material Description	Well Diagram
-2 to 38	0	SB-23/MW-23 (15'-16'); SB-23/MW-23 (30'-31'); SB-23/MW-23 (35'-37')				**0'-7' Hydro-excavation** **7'-37' HSA** Silty Sand: moderate yellowish brown (10YR 5/4) to pale yellowish brown (10YR 6/2), dry to slightly moist, fine to medium grained sand, no hydrocarbon odor, minor oxidation at 7' and 10' Sand: moderate yellowish brown (10YR 5/4) to pale yellowish brown (10YR 6/2), slightly moist, fine to medium grained sand, no hydrocarbon odor 20' - dark yellowish brown (10YR 4/2), dusky yellowish brown (10YR 2/2), and light olive gray (5Y 5/2) 22' - no recovery Sandstone: fine grained, slightly moist, no hydrocarbon odor 25'-37' - medium gray (N5) to dark yellowish brown (10YR 4/2), minor oxidation at 31' TD at 37 ft bgs	portland cement hydrated bentonite sand pack

Disclaimer This bore log should not be used separately from this report..

BORING LOG SB-24/MW-24

PROJECT NUMBER 05B1226001
PROJECT NAME Lateral K-12 Y#3
CLIENT Enterprise Field Services, LLC
LOCATION Rio Arriba County, NM

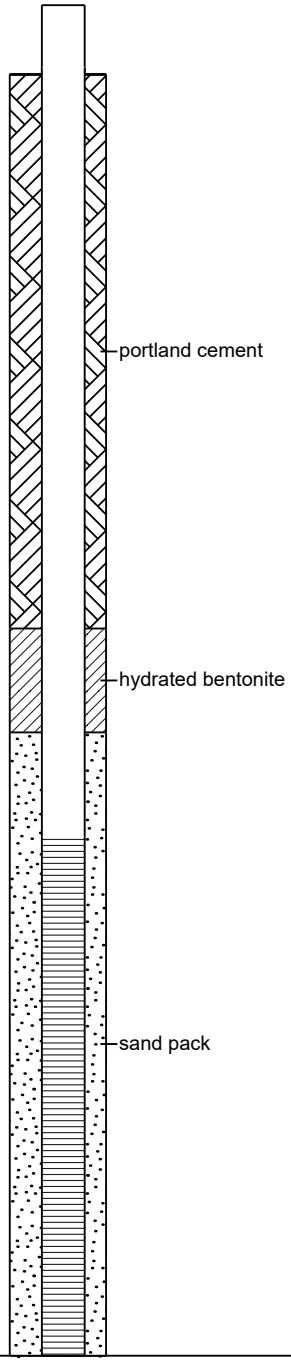
DRILLING DATE 7/19/22
DRILLING COMPANY Enviro-Drill
BORING METHOD HSA - Split Spoon
TOTAL DEPTH 37 feet
BOREHOLE DIAMTER 8.25"

NORTH COORDINATE 36.554393 N
WEST COORDINATE 107.54973 W
SURFACE COMPLETION Above Grade Vault
LOGGED BY R.Deechilly
SAMPLER R. Deechilly

Notes:

Depth (ft)	PID (ppmv)	Samples	Recovery (%)	Water	Graphic Log	Material Description
-2						**0'-7' Hydro-excavation**
0						
2						
4						
6						**7'-37' HSA**
8	0					Silty Sand: moderate yellowish brown (10YR 5/4) to pale yellowish brown (10YR 6/2), dry to slightly moist, fine to medium grained sand, no hydrocarbon odor, minor oxidation from 10'-17'
10	0					
12	0					
14						
16	0	SB-24/MW-24 (15'-16')				15' - moderate yellowish brown (10YR 5/4), dark yellowish brown (10YR 4/2), and light olive gray (5Y 5/2)
18	0					
20	0					
22	0					23' - moderate yellowish brown (10YR 5/4), dark yellowish brown (10YR 4/2), medium gray (N5), traces of very dusky purple (5P 2/2)
24						Sandstone: weathered, dark yellowish brown (10YR 4/2), very minor oxidation at 32', fine grained, slightly moist, no hydrocarbon odor
26	0					
28	0					
30	0	SB-24/MW-24 (30'-31')				
32	0					
34						
36	0	SB-24/MW-24 (35'-37')				
38						TD at 37 ft bgs

Well Diagram



Disclaimer This bore log should not be used separately from this report..

ENSOLUM

APPENDIX D

Tables

ENSOLUM

TABLE 1
Lateral K-12 Y #3 Condensate Tank Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
Soil Borings Advanced by Animas Environmental Services, LLC during Initial Release Assessment (2012)												
SB-1	3.20.12	8	<1.0	36	9.9	140	**186**	1,800	800	NA	**2,600**	NA
SB-2	3.20.12	8	<0.97	5.4	6.2	90	**102**	1,500	1,100	NA	**2,600**	NA
SB-3	3.20.12	8	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10	NA	ND	NA
SB-4	3.20.12	8	<0.050	<0.050	<0.050	0.24	0.24	13	<10	NA	13	NA
Excavation Soil Samples Collected by Animas Environmental Services, LLC (2012)												
S-1	4.09.12	20 to 25	3.2	18	8.1	100	**129**	1,400	490	NA	**1,890**	<30
S-2	4.09.12	30	**11**	86	18	210	**325**	3,400	980	NA	**4,380**	140
SC-1	4.17.12	35	<0.93	2.3	<0.93	8.4	11	180	140	<49	**320**	NA
SC-2	4.17.12	35	<4.7	38	8.1	110	**156**	1,600	620	59	**2,279**	NA
SC-3	4.17.12	35	<2.3	3.9	<2.3	23	27	430	310	69	**809**	NA
SC-4	4.17.12	35	<2.4	24	5.9	77	**107**	1,200	520	68	**1,788**	NA
SC-5	4.17.12	35	<0.99	6.7	2.3	27	36	540	200	<49	**740**	NA
SC-6	4.17.12	25 to 35	2.5	35	5.5	70	**113**	1,200	790	<490	**1,990**	NA
SC-7	4.17.12	25 to 35	<0.94	4.8	1.5	18	24	410	180	<49	**590**	NA
SC-8	4.17.12	25 to 35	<0.048	<0.048	<0.048	<0.095	ND	<4.8	<9.9	<50	ND	NA
SC-9	4.17.12	25 to 35	<0.94	<0.94	<0.94	14	14	160	100	<48	**260**	NA
Soil Borings Advanced by Animas Environmental Services, LLC (2012-2014)												
SB-1/SVE-1	4.25.12	25 to 27	<0.47	0.97	0.59	7.8	9.4	150	420	61	**631**	NA
	4.25.12	35 to 37	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<10	<52	ND	NA
SB-2	4.25.12	15 to 17	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<9.9	<49	ND	NA
	4.25.12	25 to 27	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10	<50	ND	NA
	4.25.12	30 to 32	<0.050	<0.050	<0.050	<0.099	ND	<5.0	<9.6	<48	ND	NA

ENSOLUM

TABLE 1
Lateral K-12 Y #3 Condensate Tank Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
SB-3/SVE-2	4.25.12	20 to 22	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<9.8	<49	ND	NA
	4.25.12	25 to 27	<0.97	0.99	4.1	43	48	1,100	820	97	**2,017**	NA
	4.25.12	30 to 32	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10	<50	ND	NA
SB-4/SVE-3	4.26.12	5 to 7	<0.097	<0.097	<0.097	<0.19	ND	<9.7	210	NA	**210**	NA
	4.26.12	25 to 27	<0.049	<0.049	<0.049	<0.099	ND	<4.9	15	NA	15	NA
	4.26.12	30 to 32	<0.049	<0.049	<0.049	0.37	0.37	13	<9.6	NA	13	NA
SB-5	4.26.12	20 to 22	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10	NA	ND	NA
	4.26.12	25 to 27	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<9.9	NA	ND	NA
SB-6	4.30.12	15 to 17	<0.049	<0.049	<0.049	<0.099	ND	<4.9	<10	NA	ND	NA
	4.30.12	20 to 22	<0.047	<0.047	<0.047	<0.093	ND	<4.7	<10	NA	ND	NA
	4.30.12	25 to 27	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<10	NA	ND	NA
SB-7	4.30.12	15 to 17	<0.049	<0.049	<0.049	<0.097	ND	<4.9	<9.8	NA	ND	NA
	4.30.12	20 to 22	<0.050	<0.050	<0.050	<0.099	ND	<5.0	<9.9	NA	ND	NA
	4.30.12	25 to 27	<0.048	<0.048	<0.048	<0.097	ND	<4.8	<9.8	NA	ND	NA
SB-8	6.19.13	20 to 22	<0.12	0.50	0.96	6.4	7.9	240	28	NA	**268**	NA
	6.19.13	22 to 24	0.24	1.3	2.7	19	23	680	460	NA	**1,140**	NA
	6.19.13	24 to 25	<0.12	0.49	4.9	33	38	1,100	790	NA	**1,890**	NA
SB-9	6.19.13	20 to 22	<0.093	0.12	0.27	1.9	2.3	57	29	NA	85	NA
	6.19.13	22 to 24	2.2	32	10	100	**144**	2,000	890	NA	**2,890**	NA
	6.19.13	24 to 25	1.2	21	7.0	53	**82**	1,700	570	NA	**2,270**	NA
SB-10/MW-1	1.14.14	24.5 to 25	<0.001	<0.001	<0.001	<0.003	ND	<0.05	<2	NA	ND	NA
SB-11/MW-2	1.14.14	27.5 to 28	<0.006	0.05	0.3	12	12	190	270	NA	**460**	NA
SB-12/MW-3	1.15.14	16 to 17	<0.001	<0.001	<0.001	<0.003	ND	<0.05	<2	NA	ND	NA
SB-13/MW-4	1.16.14	16 to 17	<0.001	0.003	<0.001	<0.004	0.003	<0.06	<2	NA	ND	NA
	1.16.14	24 to 25	<0.001	<0.001	<0.001	<0.003	ND	<0.05	13	NA	13	NA

ENSOLUM

TABLE 1
Lateral K-12 Y #3 Condensate Tank Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
SB-14/MW-5	1.15.14	23 to 24	<0.001	<0.001	<0.001	<0.003	ND	<0.06	2	NA	2	NA
	1.15.14	27 to 28	<0.001	0.003	<0.001	<0.004	0.003	<0.06	18	NA	18	NA
SB-15/SVE-1R	1.15.14	22.5 to 23.5	<0.001	<0.001	<0.001	<0.003	ND	<0.06	<2	NA	ND	NA
Soil Borings Advanced by Apex TITAN, Inc (2016)												
MW-11	8.30.16	29 to 29.5	<0.24	<0.48	1.0	10	11	410	150	NA	**560**	NA
MW-12	8.30.16	27 to 27.5	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<9.9	NA	ND	NA
MW-13	8.31.16	25 to 27.5	0.50	6.3	5.1	35	47	2,500	270	NA	**2,770**	NA
SB-14A	8.31.16	25 to 26	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<9.5	NA	ND	NA
SB-15A	8.31.16	22.5 to 25	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.9	NA	ND	NA
SB-16A	9.1.16	20 to 22.5	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<10	NA	ND	NA
SB-17A	8.30.16	23 to 23.5	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<10	NA	ND	NA
Soil Borings Advanced by Ensolum, LLC (2020 & 2022)												
MW-18	10.22.20	10 to 12	<0.025	<0.049	<0.049	<0.099	ND	<4.9	<9.6	<48	ND	<60
	10.22.20	28 to 32	<0.025	<0.049	<0.049	<0.099	ND	9.1	<9.6	<48	9.1	<60
MW-19	10.22.20	12 to 14	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<9.5	<47	ND	<59
	10.22.20	28 to 30	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<9.5	<48	ND	<60
SB-20	10.22.20	16 to 18	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<9.9	<49	ND	<60
	10.22.20	32 to 34	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.9	<49	ND	<60
MW-21	10.21.20	12 to 14	<0.025	<0.050	<0.050	<0.10	ND	<5.0	18	<46	18	92
	10.21.20	32 to 34	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.3	<47	ND	<59
SB-22/MW-22	7.18.22	15 to 17	<0.024	<0.048	<0.048	<0.095	ND	<4.8	<15	<50	ND	<59
		31 to 32	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<15	<49	ND	<60
		35 to 37	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<15	<50	ND	<60

ENSOLUM

TABLE 1
Lateral K-12 Y #3 Condensate Tank Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria			**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
SB-23/MW-23	7.19.22	15 to 16	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<15	<49	ND	88
		30 to 31	<0.025	<0.049	<0.049	<0.099	ND	<4.9	<15	<50	ND	<61
		35 to 37	<0.024	<0.047	<0.047	<0.095	ND	<4.7	16	<49	16	<59
SB-24/MW-24	7.19.22	15 to 16	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<15	<50	ND	62
		30 to 31	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<15	<50	ND	<60
		35 to 37	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<15	<50	ND	<60

*Note: Concentrations in **bold** and yellow exceed the applicable OCD Closure Criteria*
mg/kg = milligrams per kilogram
ND = Not Detected above the Laboratory RLs or PQLs
NE = Not established
NA = Not Analyzed
BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
MRO = Motor Oil/Lube Oil Range Organics

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TABLE 2
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]	NE	NE	NE
Monitoring Wells Installed by Animas Environmental Services, LLC								
SVE-1	10.8.13	Not Sampled - Damaged well screen						
SVE-1R	2.12.14	**610**	**1,500**	100	**2,400**	NA	NA	NA
	11.13.14	**170**	3.4	93	190	NA	NA	NA
	5.26.15	**32**	<5.0	93	59	NA	NA	NA
	12.2.15	**220**	69	57	180	NA	NA	NA
	6.14.16	**150**	<5.0	28	57	NA	NA	NA
	12.12.16	**150**	<5.0	64	190	3.5	1.6	<5.0
	7.06.17	**63**	<5.0	33	90	NA	NA	NA
	12.12.17	**72**	<5.0	26	72	NA	NA	NA
	6.28.18	3.8	<5.0	12	8.8	NA	NA	NA
	12.18.18*	5.6	1.9	12	38	NA	NA	NA
	8.29.19	**26**	2.2	6.4	20	NA	NA	NA
	12.27.19	**45**	<1.0	22	47	NA	NA	NA
	5.19.20	1.9	<1.0	3.4	4.7	NA	NA	NA
	12.8.20	2.2	<1.0	4.6	4.1	NA	NA	NA
	5.12.21	<1.0	<1.0	3.0	<2.0	NA	NA	NA
	11.29.21	<1.0	<1.0	1.6	<2.0	NA	NA	NA
	5.23.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	11.30.22	<1.0	1.6	3.7	25	NA	NA	NA
SVE-2	10.8.13	**1,600**	180	270	**4,200**	18	15	<5.0
	2.12.14	**1,500**	100	360	**3,100**	NA	NA	NA
	11.13.14	**1,300**	110	270	**1,900**	NA	NA	NA
	5.27.15	**1,600**	<50	340	**2,300**	NA	NA	NA
	12.2.15	**1,200**	<50	280	**2,400**	NA	NA	NA
	6.14.16	**1,200**	<50	250	**2,500**	NA	NA	NA
	12.12.16	**1,100**	<50	330	**3,200**	16	13	<5.0
	7.06.17	**810**	<50	190	**1,900**	NA	NA	NA
	12.13.17	**1,100**	<50	200	**1,800**	NA	NA	NA
	6.28.18	**1,200**	<50	250	**2,100**	NA	NA	NA
	12.18.18*	**970**	<50	170	**1,400**	NA	NA	NA
	8.29.19	**810**	<50	220	**2,200**	NA	NA	NA
	12.30.19	**960**	<20	220	**2,000**	NA	NA	NA
	5.19.20	**1,000**	<20	320	**2,600**	NA	NA	NA
	12.8.20	**900**	<5.0	240	**1,500**	NA	NA	NA
	5.12.21	**650**	<5.0	170	**1,100**	NA	NA	NA
	11.29.21	**560**	<2.0	140	**1,200**	NA	NA	NA
	5.23.22	**630**	<2.0	180	**1,400**	NA	NA	NA
	11.30.22	**900**	<20	260	**1,900**	NA	NA	NA

ENSOLUM

TABLE 2
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]	NE	NE	NE
SVE-3	10.8.13	**110**	450	210	**2,000**	20	9.3	<5.0
	2.12.14	**78**	170	160	**1,500**	NA	NA	NA
	11.13.14	**12**	6.5	68	140	NA	NA	NA
	5.26.15	3.2	<5.0	100	<10	NA	NA	NA
	12.2.15	<5.0	<5.0	91	<10	NA	NA	NA
	6.14.16	<5.0	<5.0	78	57	NA	NA	NA
	12.12.16	**14**	<5.0	95	140	8.1	5.5	<5.0
	7.06.17	6.7	<5.0	110	170	NA	NA	NA
	12.12.17	3.8	<2.5	42	11	NA	NA	NA
	6.28.18	3.7	<5.0	60	11	NA	NA	NA
	12.18.18*	9.3	5.6	110	150	NA	NA	NA
	8.29.19	4.4	<5.0	94	170	NA	NA	NA
	12.27.19	9.4	<1.0	150	220	NA	NA	NA
	5.19.20	2.5	<2.0	110	130	NA	NA	NA
	12.8.20	**11**	<2.0	150	160	NA	NA	NA
	5.12.21	7.6	<2.0	120	130	NA	NA	NA
	11.29.21	9.1	<2.0	120	170	NA	NA	NA
	5.23.22	**43**	140	150	380	NA	NA	NA
	11.30.22	**140**	560	290	**1,800**	NA	NA	NA
MW-1	2.12.14	<1	<1	<1	<3	NA	NA	NA
	11.13.14	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	5.26.15	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	12.2.15	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	6.14.16	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	12.12.16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
	7.06.17	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	12.12.17	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	6.28.18	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	12.18.18*	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	8.29.19	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	12.27.19	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	5.19.20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	12.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	5.12.21	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	11.29.21	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	5.23.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	11.29.22	<1.0	<1.0	<1.0	<2.0	NA	NA	NA

ENSOLUM

TABLE 2
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]	NE	NE	NE
MW-2	2.12.14	**2,300**	**1,500**	350	**3,600**	NA	NA	NA
	11.13.14	**1,600**	520	220	**2,500**	NA	NA	NA
	5.27.15	**2,600**	530	370	**3,600**	NA	NA	NA
	12.2.15	**980**	<50	240	**2,600**	NA	NA	NA
	6.14.16	**1,800**	<50	380	**4,500**	NA	NA	NA
	12.12.16	**2,800**	<50	390	**4,700**	26	7.1	<5.0
	7.06.17	**2,100**	<50	410	**4,800**	NA	NA	NA
	12.13.17	**1,300**	<50	160	**1,800**	NA	NA	NA
	6.28.18	**1,700**	<50	240	**2,500**	NA	NA	NA
	12.18.18*	**2,100**	<50	210	**2,200**	NA	NA	NA
	8.29.19	**1,500**	<50	180	**2,100**	NA	NA	NA
	12.30.19	**2,600**	<20	300	**2,900**	NA	NA	NA
	5.19.20	**1,500**	<50	240	**2,600**	NA	NA	NA
	12.8.20	**1,100**	<5.0	140	**1,300**	NA	NA	NA
	5.12.21	**1,200**	<5.0	170	**1,100**	NA	NA	NA
	11.29.21	**1,600**	<5.0	180	**1,100**	NA	NA	NA
	5.23.22	**1,800**	<5.0	200	**1,200**	NA	NA	NA
	11.30.22	**970**	<50	260	**1,800**	NA	NA	NA
MW-3	2.12.14	Not Sampled - Well Dry						
	11.13.14							
	5.26.15							
	12.2.15							
	6.14.16							
	12.12.16							
	7.06.17							
	12.12.17							
	6.28.18							
	12.18.18*							
	8.29.19							
	12.30.19							
	5.19.20							
	12.8.20							
	5.12.21							
	11.29.21							
	5.23.22							
	11.29.22							

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TABLE 2
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		**10[A]**	**750[A]**	**750[A]**	**620[A]**	**NE**	**NE**	**NE**
MW-4	2.12.14	Not Sampled - Well Dry						
	11.13.14							
	5.26.15							
	12.2.15							
	6.14.16							
	12.12.16							
	7.06.17							
	12.12.17							
	6.28.18							
	12.18.18*							
	8.29.19							
	12.30.19							
	5.19.20							
	12.8.20							
	5.12.21							
	11.29.21							
	5.23.22							
	11.29.22							
MW-5	2.12.14	**1,100**	**2,900**	220	**1,900**	NA	NA	NA
	11.13.14	Not Sampled - Insufficient volume to collect sample						
	5.26.15							
	12.2.15							
	6.14.16							
	12.12.16							
	7.06.17							
	12.13.17							
	6.28.18							
	12.18.18*							
	8.29.19							
	12.30.19							
	5.19.20							
	12.8.20							
	5.12.21							
	11.29.21							
	5.23.22							
	11.29.22							

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TABLE 2
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		10[A]	750[A]	750[A]	620[A]	NE	NE	NE
Monitoring Wells Installed by APEX TITAN, INC.								
MW-11	9.22.16	**320**	240	300	**3,700**	NA	NA	NA
	12.12.16	**430**	140	450	**5,000**	23	1.4	<5.0
	7.06.17	**390**	110	390	**4,200**	NA	NA	NA
	12.12.17	**520**	170	310	**3,100**	NA	NA	NA
	6.28.18	**590**	320	350	**3,400**	NA	NA	NA
	12.18.18*	**590**	<50	280	**3,000**	NA	NA	NA
	8.29.19	**130**	<50	230	**2,800**	NA	NA	NA
	12.30.19	**270**	<20	300	**3,200**	NA	NA	NA
	5.19.20	**260**	42	490	**5,400**	NA	NA	NA
	12.8.20	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	5.12.21	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	11.29.21	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	5.23.22	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**
	11.29.22	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**	**NAPL**
MW-12	9.22.16	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	12.12.16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
	7.06.17	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	12.12.17	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	6.28.18	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	12.18.18*	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	8.29.19	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	12.27.19	<1.0	<1.0	11	16	NA	NA	NA
	5.19.20	<1.0	<1.0	<1.0	6.4	NA	NA	NA
	12.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	5.19.20	<1.0	<1.0	<1.0	6.4	NA	NA	NA
	12.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	5.12.21	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	11.29.21	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	5.23.22[B]	Well Destroyed						

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TABLE 2
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		**10[A]**	**750[A]**	**750[A]**	**620[A]**	**NE**	**NE**	**NE**
MW-13	9.22.16	**150**	**1,600**	270	**2,400**	NA	NA	NA
	01.06.17	**120**	660	53	**880**	NA	NA	NA
	7.06.17	**55**	290	46	470	NA	NA	NA
	12.12.17	**58**	110	19	150	NA	NA	NA
	6.28.18	8.5	7.5	5.9	36	NA	NA	NA
	12.18.18*	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	8.29.19	1.6	<1.0	1.1	<2.0	NA	NA	NA
	12.27.19	1.5	1.0	1.2	3.0	NA	NA	NA
	5.19.20	<1.0	1.3	2.5	2.7	NA	NA	NA
	12.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	5.12.21	2.3	<1.0	1.1	3.0	NA	NA	NA
	11.29.21	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	5.23.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	11.29.22	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
Monitoring Wells Installed by Ensolum, LLC								
MW-18	12.8.20	**340**	52	11	560	NA	NA	NA
	5.12.21	**1,100**	24	150	**960**	NA	NA	NA
	11.29.21	**1,200**	4.2	120	220	NA	NA	NA
	5.23.22	**1,200**	6.2	170	240	NA	NA	NA
	11.30.22	**1,400**	7.4	190	270	NA	NA	NA
MW-19	12.8.20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	5.12.21	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	11.29.21	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
	5.23.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	11.30.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-21	12.8.20	Not Sampled - Insufficient volume to collect sample						
	5.12.21							
	11.29.21							
	5.23.22							
	11.29.22							
MW-22	11.30.22	3.0	<1.0	6.2	20	NA	NA	NA
MW-23	11.30.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-24	11.30.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA

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

A = NMAC 20.6.2 was amended (12/21/18). This table reflects the GQS standards indicated in the approved Stage 1 Abatement Plan.

B - Monitoring well was destroyed due to erosion. Therefore, this well has not been sampled since November 2021.

** Interface probe malfunction during sampling event. Site gauged on 1/21/19*

ENSOLUM

TABLE 2
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ANALYTICAL SUMMARY

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		**10[A]**	**750[A]**	**750[A]**	**620[A]**	**NE**	**NE**	**NE**

µg/L = microgram per liter

mg/L = milligram per liter

NAPL = Non-aqueous phase liquid

NA = Not Analyzed

NE = Not Established

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

<1.0= the numeral (in this case "1.0") identifies the laboratory reporting or practical quantitation limit

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TABLE 3
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation[1] (feet AMSL)
SVE-1	10.08.13	ND	27.46	ND	NA	NA
SVE-1R*	02.12.14	ND	29.06	ND	6606.09	6577.03
	11.13.14	ND	30.05	ND		6576.04
	5.26.15	ND	29.27	ND		6576.82
	12.02.15	ND	28.06	ND		6578.03
	6.14.16	ND	28.05	ND		6578.04
	9.22.16	ND	28.10	ND	6606.40	6578.30
	12.12.16	ND	28.15	ND		6578.25
	7.06.17	ND	28.24	ND		6578.16
	12.12.17	ND	28.35	ND		6578.05
	6.28.18	ND	28.80	ND		6577.60
	1.21.19**	ND	28.81	ND		6577.59
	8.29.19	ND	28.57	ND		6577.83
	12.26.19	ND	28.59	ND		6577.81
	5.19.20	ND	29.02	ND		6577.38
	12.8.20	ND	29.28	ND		6577.12
	5.12.21	ND	29.52	ND		6576.88
	11.29.21	ND	29.44	ND		6576.96
	5.23.22	ND	29.62	ND		6576.78
	11.29.22	ND	28.64	ND		6577.76
SVE-2*	10.08.13	ND	28.00	ND	6605.82	6577.82
	02.12.14	ND	29.39	ND		6576.43
	11.13.14	ND	29.42	ND		6576.40
	5.26.15	ND	29.86	ND		6575.96
	12.02.15	ND	28.74	ND		6577.08
	6.14.16	ND	28.58	ND		6577.24
	9.22.16	ND	28.77	ND	6606.38	6577.61
	12.12.16	ND	28.74	ND		6577.64
	7.06.17	ND	29.26	ND		6577.12
	12.12.17	ND	29.50	ND		6576.88
	6.28.18	ND	30.05	ND		6576.33
	1.21.19**	ND	29.82	ND		6576.56
	8.29.19	ND	30.07	ND		6576.31
	12.26.19	ND	29.90	ND		6576.48
	5.19.20	ND	30.41	ND		6575.97
	12.8.20	ND	30.53	ND		6575.85
	5.12.21	ND	30.79	ND		6575.59
	11.29.21	ND	30.68	ND		6575.70
	5.23.22	ND	30.75	ND		6575.63
	11.29.22	ND	29.64	ND		6576.74

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TABLE 3
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation[1] (feet AMSL)
SVE-3*	10.08.13	ND	31.85	ND	6607.46	6575.61
	02.12.14	ND	29.98	ND		6577.48
	11.13.14	ND	29.54	ND		6577.92
	5.26.15	ND	30.93	ND		6576.53
	12.02.15	ND	30.49	ND		6576.97
	6.14.16	ND	30.37	ND		6577.09
	9.22.16	ND	30.50	ND	6607.92	6577.42
	12.12.16	ND	30.28	ND		6577.64
	7.06.17	ND	31.77	ND		6576.15
	12.12.17	ND	30.79	ND		6577.13
	6.28.18	ND	31.08	ND		6576.84
	1.21.19**	ND	30.91	ND		6577.01
	8.29.19	ND	31.24	ND		6576.68
	12.26.19	ND	31.09	ND		6576.83
	5.19.20	ND	31.48	ND		6576.44
	12.8.20	ND	31.67	ND		6576.25
	5.12.21	ND	31.87	ND		6576.05
	11.29.21	ND	31.93	ND		6575.99
	5.23.22	ND	32.05	ND		6575.87
	11.29.22	ND	31.29	ND		6576.63
MW-1*	02.12.14	ND	40.95	ND	6606.53	6565.58
	11.13.14	ND	38.45	ND		6568.08
	5.26.15	ND	38.78	ND		6567.75
	12.02.15	ND	39.53	ND		6567.00
	6.14.16	ND	39.97	ND		6566.56
	9.22.16	ND	39.91	ND	6607.05	6567.14
	12.12.16	ND	39.58	ND		6567.47
	7.06.17	ND	40.28	ND		6566.77
	12.12.17	ND	40.21	ND		6566.84
	6.28.18	ND	40.27	ND		6566.78
	1.21.19**	ND	39.69	ND		6567.36
	8.29.19	ND	40.05	ND		6567.00
	12.26.19	ND	38.56	ND		6568.49
	5.19.20	ND	40.02	ND		6567.03
	12.8.20	ND	40.13	ND		6566.92
	5.12.21	ND	40.16	ND		6566.89
	11.29.21	ND	40.49	ND		6566.56
	5.23.22	ND	40.19	ND		6566.86
	11.29.22	ND	39.68	ND		6567.37

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TABLE 3
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation[1] (feet AMSL)
MW-2*	02.12.14	ND	28.79	ND	6605.80	6577.01
	11.13.14	ND	29.27	ND		6576.53
	5.26.15	ND	29.45	ND		6576.35
	12.02.15	ND	28.28	ND		6577.52
	6.14.16	ND	28.37	ND		6577.43
	9.22.16	ND	28.62	ND	6606.28	6577.66
	12.12.16	ND	28.70	ND		6577.58
	7.06.17	ND	29.00	ND		6577.28
	12.12.17	ND	29.22	ND		6577.06
	6.28.18	ND	29.61	ND		6576.67
	1.21.19**	ND	29.35	ND		6576.93
	8.29.19	ND	29.41	ND		6576.87
	12.26.19	ND	29.61	ND		6576.67
	5.19.20	ND	29.88	ND		6576.40
	12.8.20	ND	30.08	ND		6576.20
	5.12.21	ND	30.24	ND		6576.04
	11.29.21	ND	29.78	ND		6576.50
	5.23.22	ND	30.05	ND		6576.23
	11.29.22	ND	28.60	ND		6577.68
MW-3*	02.12.14	DRY	DRY	DRY	6607.53	DRY
	11.13.14	DRY	DRY	DRY		DRY
	5.26.15	DRY	DRY	DRY		DRY
	12.02.15	DRY	DRY	DRY		DRY
	6.14.16	DRY	DRY	DRY		DRY
	9.22.16	DRY	DRY	DRY	6608.04	DRY
	12.12.16	DRY	DRY	DRY		DRY
	7.06.17	DRY	DRY	DRY		DRY
	12.12.17	DRY	DRY	DRY		DRY
	6.28.18	DRY	DRY	DRY		DRY
	1.21.19**	DRY	DRY	DRY		DRY
	8.29.19	DRY	DRY	DRY		DRY
	12.26.19	DRY	DRY	DRY		DRY
	5.19.20	DRY	DRY	DRY		DRY
	12.8.20	DRY	DRY	DRY		DRY
	5.12.21	DRY	DRY	DRY		DRY
	11.29.21	DRY	DRY	DRY		DRY
	5.23.22	DRY	DRY	DRY		DRY
	11.29.22	DRY	DRY	DRY		DRY

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TABLE 3
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation[1] (feet AMSL)
MW-4*	02.12.14	DRY	DRY	DRY	6609.20	DRY
	11.13.14	DRY	DRY	DRY		DRY
	5.26.15	DRY	DRY	DRY		DRY
	12.02.15	DRY	DRY	DRY		DRY
	6.14.16	DRY	DRY	DRY		DRY
	9.22.16	DRY	DRY	DRY	6609.66	DRY
	12.12.16	DRY	DRY	DRY		DRY
	7.06.17	DRY	DRY	DRY		DRY
	12.12.17	DRY	DRY	DRY		DRY
	6.28.18	DRY	DRY	DRY		DRY
	1.21.19**	DRY	DRY	DRY		DRY
	8.29.19	DRY	DRY	DRY		DRY
	12.26.19	DRY	DRY	DRY		DRY
	5.19.20	DRY	DRY	DRY		DRY
	12.8.20	DRY	DRY	DRY		DRY
	5.12.21	DRY	DRY	DRY		DRY
	11.29.21	DRY	DRY	DRY		DRY
	5.23.22	DRY	DRY	DRY		DRY
	11.29.22	DRY	DRY	DRY		DRY
MW-5*	02.12.14	ND	29.87	ND	6607.11	6577.24
	11.13.14	ND	30.04	ND		6577.07
	5.26.15	DRY	DRY	DRY		DRY
	12.02.15	DRY	DRY	DRY		DRY
	6.14.16	DRY	DRY	DRY		DRY
	9.22.16	ND	30.04	ND	6607.59	6577.55
	12.12.16	ND	30.50	ND		6577.09
	7.06.17	ND	30.05	ND		6577.54
	12.12.17	ND	30.06	ND		6577.53
	6.28.18	ND	30.50	ND		6577.09
	1.21.19**	ND	30.49	ND		6577.10
	8.29.19	ND	30.52	ND		6577.07
	12.26.19	ND	30.51	ND		6577.08
	5.19.20	ND	30.58	ND		6577.01
	12.8.20	ND	30.60	ND		6576.99
	5.12.21	DRY	DRY	DRY		DRY
	11.29.21	DRY	DRY	DRY		DRY
	5.23.22	DRY	DRY	DRY		DRY
	11.29.22	DRY	DRY	DRY		DRY

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TABLE 3
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation[1] (feet AMSL)
MW-11	9.22.16	ND	27.71	ND	6604.64	6576.93
	12.12.16	ND	27.65	ND		6576.99
	7.06.17	ND	28.25	ND		6576.39
	12.12.17	ND	28.75	ND		6575.89
	6.28.18	ND	29.18	ND		6575.46
	1.21.19**	ND	28.41	ND		6576.23
	8.29.19	ND	28.70	ND		6575.94
	12.26.19	ND	29.12	ND		6575.52
	5.19.20	ND	29.40	ND		6575.24
	12.8.20	29.54	32.31	2.77		6574.35
	5.12.21	29.69	30.57	0.88		6574.71
	11.29.21	28.42	29.37	0.95		6575.96
	5.23.22	28.99	29.76	0.77		6575.44
	11.29.22	27.55	27.57	0.02		6577.08
MW-12	9.22.16	ND	27.71	ND	6605.01	6577.30
	12.12.16	ND	27.60	ND		6577.41
	7.06.17	ND	28.32	ND		6576.69
	12.12.17	ND	28.82	ND		6576.19
	6.28.18	ND	29.23	ND		6575.78
	1.21.19**	ND	28.22	ND		6576.79
	8.29.19	ND	28.51	ND		6576.50
	12.26.19	ND	28.85	ND		6576.16
	5.19.20	ND	29.56	ND		6575.45
	12.8.20	ND	29.78	ND		6575.23
	5.12.21	ND	30.21	ND		6574.80
	11.29.21	ND	28.62	ND		6576.39
	5.23.22	ND	29.28	ND		6575.73
	11.29.22	Well Destroyed				

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TABLE 3
Lateral K-12 Y#3 Condensate Tank Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	TOC Elevations (feet AMSL)	Groundwater Elevation[1] (feet AMSL)
MW-13	9.22.16	ND	33.60	ND	6607.61	6574.01
	12.12.16	ND	35.10	ND		6572.51
	7.06.17	ND	31.47	ND		6576.14
	12.12.17	ND	31.42	ND		6576.19
	6.28.18	ND	31.65	ND		6575.96
	1.21.19**	ND	31.81	ND		6575.80
	8.29.19	ND	32.00	ND		6575.61
	12.26.19	ND	31.64	ND		6575.97
	5.19.20	ND	32.23	ND		6575.38
	12.8.20	ND	32.48	ND		6575.13
	5.12.21	ND	32.68	ND		6574.93
	11.29.21	ND	33.13	ND		6574.48
	5.23.22	ND	33.22	ND		6574.39
	11.29.22	ND	33.25	ND		6574.36
MW-18	12.8.20	ND	34.25	ND	6605.32	6571.07
	5.12.21	ND	33.24	ND		6572.08
	11.29.21	ND	33.33	ND		6571.99
	5.23.22	ND	33.16	ND		6572.16
	11.29.22	ND	32.96	ND	6605.35	6572.39
MW-19	12.8.20	ND	34.04	ND	6604.13	6570.09
	5.12.21	ND	31.35	ND		6572.78
	11.29.21	ND	30.55	ND		6573.58
	5.23.22	ND	30.62	ND		6573.51
	11.29.22	ND	28.34	ND	6604.17	6575.83
MW-21	12.8.20	DRY	DRY	DRY	6611.38	DRY
	5.12.21	DRY	DRY	DRY		DRY
	11.29.21	DRY	DRY	DRY		DRY
	5.23.22	DRY	DRY	DRY		DRY
	11.29.22	DRY	DRY	DRY		DRY
MW-22	11.29.22	ND	33.10	ND	6605.49	6572.39
MW-23	11.29.22	ND	38.62	ND	6608.00	6569.38
MW-24	11.29.22	ND	36.74	ND	6608.20	6571.46

[1] = corrected for presence of phase-sepated hydrocarbon using an estimated product specific gravity of 0.729
**Monitoring well resurveyed on 9/27/16.*
*** Interface probe malfunction during sampling event. Site gauged on 1/21/19*
BTOC - below top of casing
AMSL - above mean sea level
TOC - top of casing
ND - Not detected
NA - Not applicable

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APPENDIX E

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 02, 2022

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

RE: Lateral K 12 Y 3 OrderNo.: 2205A34

Dear Marc Gentry:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/24/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-19
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 10:25:00 AM
Lab ID: 2205A34-001
Matrix: AQUEOUS
Received Date: 5/24/2022 7:00:00 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	5/25/2022 6:05:00 PM	SL88251
Toluene	ND	1.0		µg/L	1	5/25/2022 6:05:00 PM	SL88251
Ethylbenzene	ND	1.0		µg/L	1	5/25/2022 6:05:00 PM	SL88251
Xylenes, Total	ND	1.5		µg/L	1	5/25/2022 6:05:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%Rec	1	5/25/2022 6:05:00 PM	SL88251
Surr: Dibromofluoromethane	108	70-130		%Rec	1	5/25/2022 6:05:00 PM	SL88251
Surr: Toluene-d8	95.7	70-130		%Rec	1	5/25/2022 6:05:00 PM	SL88251

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

Qualifiers:

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

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-1
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 11:15:00 AM
Lab ID: 2205A34-002
Matrix: AQUEOUS
Received Date: 5/24/2022 7:00:00 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	5/25/2022 6:29:00 PM	SL88251
Toluene	ND	1.0		µg/L	1	5/25/2022 6:29:00 PM	SL88251
Ethylbenzene	ND	1.0		µg/L	1	5/25/2022 6:29:00 PM	SL88251
Xylenes, Total	ND	1.5		µg/L	1	5/25/2022 6:29:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	5/25/2022 6:29:00 PM	SL88251
Surr: Dibromofluoromethane	109	70-130		%Rec	1	5/25/2022 6:29:00 PM	SL88251
Surr: Toluene-d8	94.9	70-130		%Rec	1	5/25/2022 6:29:00 PM	SL88251

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

Qualifiers:

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

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SVE-1R
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 11:45:00 AM
Lab ID: 2205A34-003 **Matrix:** AQUEOUS **Received Date:** 5/24/2022 7:00:00 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	5/25/2022 6:52:00 PM	SL88251
Toluene	ND	1.0		µg/L	1	5/25/2022 6:52:00 PM	SL88251
Ethylbenzene	ND	1.0		µg/L	1	5/25/2022 6:52:00 PM	SL88251
Xylenes, Total	ND	1.5		µg/L	1	5/25/2022 6:52:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%Rec	1	5/25/2022 6:52:00 PM	SL88251
Surr: Dibromofluoromethane	106	70-130		%Rec	1	5/25/2022 6:52:00 PM	SL88251
Surr: Toluene-d8	95.7	70-130		%Rec	1	5/25/2022 6:52:00 PM	SL88251

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

Qualifiers:

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

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-13
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 12:25:00 PM
Lab ID: 2205A34-004
Matrix: AQUEOUS
Received Date: 5/24/2022 7:00:00 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	5/25/2022 7:15:00 PM	SL88251
Toluene	ND	1.0		µg/L	1	5/25/2022 7:15:00 PM	SL88251
Ethylbenzene	ND	1.0		µg/L	1	5/25/2022 7:15:00 PM	SL88251
Xylenes, Total	ND	1.5		µg/L	1	5/25/2022 7:15:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	91.7	70-130		%Rec	1	5/25/2022 7:15:00 PM	SL88251
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/25/2022 7:15:00 PM	SL88251
Surr: Toluene-d8	98.2	70-130		%Rec	1	5/25/2022 7:15:00 PM	SL88251

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

Qualifiers:

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

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SVE-3
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 12:55:00 PM
Lab ID: 2205A34-005 **Matrix:** AQUEOUS **Received Date:** 5/24/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	43	2.0		µg/L	2	5/25/2022 7:38:00 PM	SL88251
Toluene	140	2.0		µg/L	2	5/25/2022 7:38:00 PM	SL88251
Ethylbenzene	150	2.0		µg/L	2	5/25/2022 7:38:00 PM	SL88251
Xylenes, Total	380	3.0		µg/L	2	5/25/2022 7:38:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	84.4	70-130		%Rec	2	5/25/2022 7:38:00 PM	SL88251
Surr: Dibromofluoromethane	100	70-130		%Rec	2	5/25/2022 7:38:00 PM	SL88251
Surr: Toluene-d8	103	70-130		%Rec	2	5/25/2022 7:38:00 PM	SL88251

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

Qualifiers:

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

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SVE-2
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 1:30:00 PM
Lab ID: 2205A34-006 **Matrix:** AQUEOUS **Received Date:** 5/24/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	630	20		µg/L	20	5/25/2022 8:01:00 PM	SL88251
Toluene	ND	2.0		µg/L	2	5/25/2022 8:24:00 PM	SL88251
Ethylbenzene	180	2.0		µg/L	2	5/25/2022 8:24:00 PM	SL88251
Xylenes, Total	1400	30		µg/L	20	5/25/2022 8:01:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	2	5/25/2022 8:24:00 PM	SL88251
Surr: Dibromofluoromethane	102	70-130		%Rec	2	5/25/2022 8:24:00 PM	SL88251
Surr: Toluene-d8	98.7	70-130		%Rec	2	5/25/2022 8:24:00 PM	SL88251

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

Qualifiers:

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

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-18
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 2:05:00 PM
Lab ID: 2205A34-007 **Matrix:** AQUEOUS **Received Date:** 5/24/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	1200	50		µg/L	50	5/25/2022 8:47:00 PM	SL88251
Toluene	6.2	5.0		µg/L	5	5/25/2022 9:10:00 PM	SL88251
Ethylbenzene	170	5.0		µg/L	5	5/25/2022 9:10:00 PM	SL88251
Xylenes, Total	240	7.5		µg/L	5	5/25/2022 9:10:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%Rec	5	5/25/2022 9:10:00 PM	SL88251
Surr: Dibromofluoromethane	100	70-130		%Rec	5	5/25/2022 9:10:00 PM	SL88251
Surr: Toluene-d8	101	70-130		%Rec	5	5/25/2022 9:10:00 PM	SL88251

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

Qualifiers:

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

Analytical Report
Lab Order **2205A34**
Date Reported: **6/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-2
Project: Lateral K 12 Y 3
Collection Date: 5/23/2022 2:35:00 PM
Lab ID: 2205A34-008 **Matrix:** AQUEOUS **Received Date:** 5/24/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	1800	50		µg/L	50	5/25/2022 9:55:00 PM	SL88251
Toluene	ND	5.0		µg/L	5	5/25/2022 10:18:00 PM	SL88251
Ethylbenzene	200	5.0		µg/L	5	5/25/2022 10:18:00 PM	SL88251
Xylenes, Total	1200	75		µg/L	50	5/25/2022 9:55:00 PM	SL88251
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%Rec	5	5/25/2022 10:18:00 PM	SL88251
Surr: Dibromofluoromethane	99.6	70-130		%Rec	5	5/25/2022 10:18:00 PM	SL88251
Surr: Toluene-d8	101	70-130		%Rec	5	5/25/2022 10:18:00 PM	SL88251

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205A34**

02-Jun-22

Client: ENSOLUM

Project: Lateral K 12 Y 3

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL88251**	RunNo: **88251**
Prep Date:	Analysis Date: **5/25/2022**	SeqNo: **3130010** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.8	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130			
Surr: Toluene-d8	9.6		10.00		96.5	70	130			

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL88251**	RunNo: **88251**
Prep Date:	Analysis Date: **5/25/2022**	SeqNo: **3130011** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.5		10.00		95.4	70	130			

Qualifiers:

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

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 Work Order Number: 2205A34 RcptNo: 1

Received By: Juan Rojas 5/24/2022 7:00:00 AM

Completed By: Tracy Casarrubias 5/24/2022 8:13:06 AM

Reviewed By: KPA 5.24.22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: JN 5/24/22

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Not Present			

Chain-of-Custody Record

Client: Ensolum, LLC

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

Phone #: 505 mgenty

email or Fax#: [redacted]@ensolum.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Lateral K-12 Y#3

Project #: 05B1226001

Project Manager: M. Gentry

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.5-0=1.5 (°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. 2205A34	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)
5/23/22	10:25	W	MW-19	3x40mL VOA	HgCl2	001	X									
5/23/22	11:15	W	MW-1			002	X									
5/23/22	11:45	W	SVE-1R			003	X									
5/23/22	12:25	W	MW-13			004	X									
5/23/22	12:55	W	SVE-3			005	X									
5/23/22	13:30	W	SVE-2			006	X									
5/23/22	14:05	W	MW-18			007	X									
5/23/22	14:35	W	MW-2			008	X									

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/23/22	1628	[redacted]	[redacted]		5/23/22	1628
5/23/22	1810	[redacted]	[redacted]	courier	5/24/22	7:00

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.

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

July 28, 2022

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

RE: Lateral K 12 Y 3 OrderNo.: 2207926

Dear Marc Gentry:

Hall Environmental Analysis Laboratory received 9 sample(s) on 7/20/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

CLIENT: ENSOLUM
Project: Lateral K 12 Y 3
Lab ID: 2207926-001 **Matrix:** SOIL

Client Sample ID: SB-22/MW-22 @ 15'-17'
Collection Date: 7/18/2022 1:15:00 PM
Received Date: 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	59		mg/Kg	20	7/25/2022 3:32:38 PM	69029
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 5:38:29 PM	68955
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/22/2022 5:38:29 PM	68955
Surr: DNOP	95.6	21-129		%Rec	1	7/22/2022 5:38:29 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/22/2022 12:46:00 AM	68928
Surr: BFB	90.9	37.7-212		%Rec	1	7/22/2022 12:46:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/22/2022 12:46:00 AM	68928
Toluene	ND	0.048		mg/Kg	1	7/22/2022 12:46:00 AM	68928
Ethylbenzene	ND	0.048		mg/Kg	1	7/22/2022 12:46:00 AM	68928
Xylenes, Total	ND	0.095		mg/Kg	1	7/22/2022 12:46:00 AM	68928
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	7/22/2022 12:46:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Project: Lateral K 12 Y 3
Lab ID: 2207926-002 **Matrix:** SOIL

Client Sample ID: SB-22/MW-22 @ 31'-32'
Collection Date: 7/18/2022 1:20:00 PM
Received Date: 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/25/2022 3:44:58 PM	69029
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 6:02:17 PM	68955
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/22/2022 6:02:17 PM	68955
Surr: DNOP	103	21-129		%Rec	1	7/22/2022 6:02:17 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/22/2022 1:06:00 AM	68928
Surr: BFB	91.9	37.7-212		%Rec	1	7/22/2022 1:06:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/22/2022 1:06:00 AM	68928
Toluene	ND	0.049		mg/Kg	1	7/22/2022 1:06:00 AM	68928
Ethylbenzene	ND	0.049		mg/Kg	1	7/22/2022 1:06:00 AM	68928
Xylenes, Total	ND	0.097		mg/Kg	1	7/22/2022 1:06:00 AM	68928
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	7/22/2022 1:06:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-22/MW-22 @ 35'-37'
Project: Lateral K 12 Y 3
Collection Date: 7/18/2022 1:25:00 PM
Lab ID: 2207926-003 **Matrix:** SOIL **Received Date:** 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/25/2022 3:57:19 PM	69029
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 6:26:04 PM	68955
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/22/2022 6:26:04 PM	68955
Surr: DNOP	100	21-129		%Rec	1	7/22/2022 6:26:04 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2022 1:26:00 AM	68928
Surr: BFB	91.7	37.7-212		%Rec	1	7/22/2022 1:26:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	7/22/2022 1:26:00 AM	68928
Toluene	ND	0.047		mg/Kg	1	7/22/2022 1:26:00 AM	68928
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2022 1:26:00 AM	68928
Xylenes, Total	ND	0.094		mg/Kg	1	7/22/2022 1:26:00 AM	68928
Surr: 4-Bromofluorobenzene	89.3	70-130		%Rec	1	7/22/2022 1:26:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-23/MW-23 @ 15'-16'
Project: Lateral K 12 Y 3
Collection Date: 7/19/2022 10:15:00 AM
Lab ID: 2207926-004 **Matrix:** SOIL **Received Date:** 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	88	60		mg/Kg	20	7/25/2022 4:09:40 PM	69029
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 6:49:50 PM	68955
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/22/2022 6:49:50 PM	68955
Surr: DNOP	93.0	21-129		%Rec	1	7/22/2022 6:49:50 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2022 1:45:00 AM	68928
Surr: BFB	93.9	37.7-212		%Rec	1	7/22/2022 1:45:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.023		mg/Kg	1	7/22/2022 1:45:00 AM	68928
Toluene	ND	0.047		mg/Kg	1	7/22/2022 1:45:00 AM	68928
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2022 1:45:00 AM	68928
Xylenes, Total	ND	0.094		mg/Kg	1	7/22/2022 1:45:00 AM	68928
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	7/22/2022 1:45:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-23/MW-23 @ 30'-31'
Project: Lateral K 12 Y 3
Collection Date: 7/19/2022 10:20:00 AM
Lab ID: 2207926-005 **Matrix:** SOIL **Received Date:** 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	7/25/2022 4:22:00 PM	69029
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 7:13:37 PM	68955
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/22/2022 7:13:37 PM	68955
Surr: DNOP	90.7	21-129		%Rec	1	7/22/2022 7:13:37 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/22/2022 2:05:00 AM	68928
Surr: BFB	91.5	37.7-212		%Rec	1	7/22/2022 2:05:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.025		mg/Kg	1	7/22/2022 2:05:00 AM	68928
Toluene	ND	0.049		mg/Kg	1	7/22/2022 2:05:00 AM	68928
Ethylbenzene	ND	0.049		mg/Kg	1	7/22/2022 2:05:00 AM	68928
Xylenes, Total	ND	0.099		mg/Kg	1	7/22/2022 2:05:00 AM	68928
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	7/22/2022 2:05:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-23/MW-23 @ 35'-37'
Project: Lateral K 12 Y 3
Collection Date: 7/19/2022 10:25:00 AM
Lab ID: 2207926-006 **Matrix:** SOIL
Received Date: 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	59		mg/Kg	20	7/25/2022 4:34:20 PM	69029
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	16	15		mg/Kg	1	7/22/2022 7:37:25 PM	68955
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/22/2022 7:37:25 PM	68955
Surr: DNOP	91.4	21-129		%Rec	1	7/22/2022 7:37:25 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2022 2:25:00 AM	68928
Surr: BFB	93.3	37.7-212		%Rec	1	7/22/2022 2:25:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/22/2022 2:25:00 AM	68928
Toluene	ND	0.047		mg/Kg	1	7/22/2022 2:25:00 AM	68928
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2022 2:25:00 AM	68928
Xylenes, Total	ND	0.095		mg/Kg	1	7/22/2022 2:25:00 AM	68928
Surr: 4-Bromofluorobenzene	91.5	70-130		%Rec	1	7/22/2022 2:25:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Project: Lateral K 12 Y 3
Lab ID: 2207926-007 **Matrix:** SOIL

Client Sample ID: SB-24/MW-24 @ 15'-16'
Collection Date: 7/19/2022 1:05:00 PM
Received Date: 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	62	60		mg/Kg	20	7/25/2022 3:02:54 PM	69036
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 8:01:19 PM	68955
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/22/2022 8:01:19 PM	68955
Surr: DNOP	86.1	21-129		%Rec	1	7/22/2022 8:01:19 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/22/2022 2:45:00 AM	68928
Surr: BFB	93.2	37.7-212		%Rec	1	7/22/2022 2:45:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/22/2022 2:45:00 AM	68928
Toluene	ND	0.048		mg/Kg	1	7/22/2022 2:45:00 AM	68928
Ethylbenzene	ND	0.048		mg/Kg	1	7/22/2022 2:45:00 AM	68928
Xylenes, Total	ND	0.096		mg/Kg	1	7/22/2022 2:45:00 AM	68928
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	7/22/2022 2:45:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Project: Lateral K 12 Y 3
Lab ID: 2207926-008 **Matrix:** SOIL

Client Sample ID: SB-24/MW-24 @ 30'-31'
Collection Date: 7/19/2022 1:10:00 PM
Received Date: 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/25/2022 3:15:18 PM	69036
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 8:25:02 PM	68955
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/22/2022 8:25:02 PM	68955
Surr: DNOP	87.4	21-129		%Rec	1	7/22/2022 8:25:02 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2022 3:04:00 AM	68928
Surr: BFB	93.1	37.7-212		%Rec	1	7/22/2022 3:04:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/22/2022 3:04:00 AM	68928
Toluene	ND	0.047		mg/Kg	1	7/22/2022 3:04:00 AM	68928
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2022 3:04:00 AM	68928
Xylenes, Total	ND	0.094		mg/Kg	1	7/22/2022 3:04:00 AM	68928
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	7/22/2022 3:04:00 AM	68928

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

Qualifiers:

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

Analytical Report
Lab Order **2207926**
Date Reported: **7/28/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SB-24/MW-24 @ 35'-37'
Project: Lateral K 12 Y 3
Collection Date: 7/19/2022 1:15:00 PM
Lab ID: 2207926-009 **Matrix:** SOIL **Received Date:** 7/20/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	7/25/2022 3:27:42 PM	69036
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **SB**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/22/2022 8:48:51 PM	68955
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/22/2022 8:48:51 PM	68955
Surr: DNOP	89.1	21-129		%Rec	1	7/22/2022 8:48:51 PM	68955
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **BRM**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/22/2022 3:24:00 AM	68928
Surr: BFB	92.6	37.7-212		%Rec	1	7/22/2022 3:24:00 AM	68928
EPA METHOD 8021B: VOLATILES						Analyst: **BRM**	
Benzene	ND	0.024		mg/Kg	1	7/22/2022 3:24:00 AM	68928
Toluene	ND	0.048		mg/Kg	1	7/22/2022 3:24:00 AM	68928
Ethylbenzene	ND	0.048		mg/Kg	1	7/22/2022 3:24:00 AM	68928
Xylenes, Total	ND	0.096		mg/Kg	1	7/22/2022 3:24:00 AM	68928
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	7/22/2022 3:24:00 AM	68928

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207926**

28-Jul-22

Client: ENSOLUM

Project: Lateral K 12 Y 3

Sample ID: **MB-69029**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **69029**	RunNo: **89765**
Prep Date: **7/25/2022**	Analysis Date: **7/25/2022**	SeqNo: **3196984** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-69029**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **69029**	RunNo: **89765**
Prep Date: **7/25/2022**	Analysis Date: **7/25/2022**	SeqNo: **3196985** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.6	90	110			

Sample ID: **MB-69036**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **69036**	RunNo: **89785**
Prep Date: **7/25/2022**	Analysis Date: **7/25/2022**	SeqNo: **3197206** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-69036**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **69036**	RunNo: **89785**
Prep Date: **7/25/2022**	Analysis Date: **7/25/2022**	SeqNo: **3197207** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207926**

28-Jul-22

Client: ENSOLUM

Project: Lateral K 12 Y 3

Sample ID: **MB-68982** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **68982** RunNo: **89708**
Prep Date: **7/22/2022** Analysis Date: **7/22/2022** SeqNo: **3194189** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.4		10.00		94.0	51.1	141			

Sample ID: **LCS-68982** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **68982** RunNo: **89708**
Prep Date: **7/22/2022** Analysis Date: **7/22/2022** SeqNo: **3194190** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.1	51.1	141			

Sample ID: **MB-68955** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **68955** RunNo: **89708**
Prep Date: **7/21/2022** Analysis Date: **7/22/2022** SeqNo: **3196377** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		91.8	21	129			

Sample ID: **LCS-68955** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **68955** RunNo: **89708**
Prep Date: **7/21/2022** Analysis Date: **7/22/2022** SeqNo: **3196378** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	15	50.00	0	97.4	64.4	127			
Surr: DNOP	4.9		5.000		97.1	21	129			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207926**

28-Jul-22

Client: ENSOLUM

Project: Lateral K 12 Y 3

Sample ID: **lcs-68928**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **68928**	RunNo: **89674**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3193295** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	72.3	137			
Surr: BFB	2100		1000		207	37.7	212			

Sample ID: **mb-68928**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **68928**	RunNo: **89674**
Prep Date: **7/20/2022**	Analysis Date: **7/21/2022**	SeqNo: **3193296** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.5	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2207926**

28-Jul-22

Client: ENSOLUM

Project: Lateral K 12 Y 3

Sample ID: **lcs-68928** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **68928** RunNo: **89674**

Prep Date: **7/20/2022** Analysis Date: **7/21/2022** SeqNo: **3193329** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	80	120			
Toluene	0.97	0.050	1.000	0	96.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.7	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.6	70	130			

Sample ID: **mb-68928** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **68928** RunNo: **89674**

Prep Date: **7/20/2022** Analysis Date: **7/21/2022** SeqNo: **3193330** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.0	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **ENSOLUM** Work Order Number: **2207926** RcptNo: **1**

Received By: **Juan Rojas** **7/20/2022 6:50:00 AM**

Completed By: **Cheyenne Cason** **7/20/2022 8:38:21 AM**

Reviewed By: KPC 7.20.22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 7/20/22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A

Aztec, NM 87410

Phone #:

email or Fax#: mgentry@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: Lateral K-12Y #3

Project #: 05B1226001

Project Manager: M. Gentry

Sampler: R Deechilly

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.9-0=0.9 (°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. 2207926	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)	Chloride
7/18/22	1315	S	SB-22/MW-22 @ 15'-17'	1x 4oz Jar	Cool	001	X	X									X
7/18/22	1320	S	SB-22/MW-22 @ 31'-32'	1x 4oz Jar	Cool	002	X	X									X
7/18/22	1325	S	SB-22/MW-22 @ 35'-37'	1x 4oz Jar	Cool	003	X	X									X
7/19/22	1015	S	SB-23/MW-23 @ 15'-16'	1x 4oz Jar	Cool	004	X	X									X
7/19/22	1020	S	SB-23/MW-23 @ 30'-31'	1x 4oz Jar	Cool	005	X	X									X
7/19/22	1025	S	SB-23/MW-23 @ 35'-37'	1x 4oz Jar	Cool	006	X	X									X
7/19/22	1305	S	SB-24/MW-24 @ 15'-16'	1x 4oz Jar	Cool	007	X	X									X
7/19/22	1310	S	SB-24/MW-24 @ 30'-31'	1x 4oz Jar	Cool	008	X	X									X
7/19/22	1315	S	SB-24/MW-24 @ 35'-37'	1x 4oz Jar	Cool	009	X	X									X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
7/19/22	1713			Walter	7/19/22	1713
7/19/22	1811			courier	7/20/22	0750

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.

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

December 08, 2022

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

RE: K12 Y3 Condensate Tank OrderNo.: 2211E60

Dear Marc Gentry:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/30/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2211E60**
Date Reported: **12/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-13
Project: K12 Y3 Condensate Tank
Collection Date: 11/29/2022 10:40:00 AM
Lab ID: 2211E60-001 **Matrix:** AQUEOUS **Received Date:** 11/30/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	12/2/2022 12:59:13 PM	C92974
Toluene	ND	1.0		µg/L	1	12/2/2022 12:59:13 PM	C92974
Ethylbenzene	ND	1.0		µg/L	1	12/2/2022 12:59:13 PM	C92974
Xylenes, Total	ND	2.0		µg/L	1	12/2/2022 12:59:13 PM	C92974
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	12/2/2022 12:59:13 PM	C92974

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

Qualifiers:

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

Analytical Report
Lab Order **2211E60**
Date Reported: **12/8/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-1
Project: K12 Y3 Condensate Tank
Collection Date: 11/29/2022 11:25:00 AM
Lab ID: 2211E60-002 **Matrix:** AQUEOUS **Received Date:** 11/30/2022 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	12/2/2022 4:30:38 PM	C92974
Toluene	ND	1.0		µg/L	1	12/2/2022 4:30:38 PM	C92974
Ethylbenzene	ND	1.0		µg/L	1	12/2/2022 4:30:38 PM	C92974
Xylenes, Total	ND	2.0		µg/L	1	12/2/2022 4:30:38 PM	C92974
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	12/2/2022 4:30:38 PM	C92974

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2211E60**

08-Dec-22

Client: ENSOLUM

Project: K12 Y3 Condensate Tank

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **C92974**	RunNo: **92974**
Prep Date:	Analysis Date: **12/2/2022**	SeqNo: **3348449** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		91.6	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **C92974**	RunNo: **92974**
Prep Date:	Analysis Date: **12/2/2022**	SeqNo: **3348450** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	88.9	70	130			
Toluene	18	1.0	20.00	0	91.3	70	130			
Ethylbenzene	18	1.0	20.00	0	91.2	70	130			
Xylenes, Total	55	2.0	60.00	0	91.7	70	130			
Surr: 4-Bromofluorobenzene	19		20.00		95.4	70	130			

Sample ID: **2211e60-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-13**	Batch ID: **C92974**	RunNo: **92974**
Prep Date:	Analysis Date: **12/2/2022**	SeqNo: **3348456** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.1	70	130			
Toluene	19	1.0	20.00	0.4320	92.9	70	130			
Ethylbenzene	19	1.0	20.00	0.3240	93.9	70	130			
Xylenes, Total	57	2.0	60.00	1.210	93.7	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		98.0	70	130			

Sample ID: **2211e60-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-13**	Batch ID: **C92974**	RunNo: **92974**
Prep Date:	Analysis Date: **12/2/2022**	SeqNo: **3348457** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.1	70	130	3.26	20	
Toluene	19	1.0	20.00	0.4320	90.8	70	130	2.23	20	
Ethylbenzene	19	1.0	20.00	0.3240	92.4	70	130	1.58	20	
Xylenes, Total	58	2.0	60.00	1.210	93.9	70	130	0.226	20	
Surr: 4-Bromofluorobenzene	19		20.00		97.0	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	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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 Work Order Number: 2211E60 RcptNo: 1

Received By: Sean Livingston 11/30/2022 7:40:00 AM

Completed By: Tracy Casarrubias 11/30/2022 9:03:36 AM

Reviewed By: TMC 11/30/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: 11.30.22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

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

Phone #:

email or Fax#: mgentry@ensolumcom

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: K-12 Y#3 Condensate Tank

Project #: 05B1226001

Project Manager: MGentry

Sampler: L. Daniell

On Ice: ☑ Yes ☐ No

# of Coolers: 3 1.4+0=1.4°C

Cooler Temp (Including CF): 0.4+0=0.4°C (°C) 1.6+0=1.6°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. 2211E60	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)
11/29/22	10:40	W	MW-13	3x40mL VOA	$HgCl_2$	001	X									
11/29/22	11:25	W	MW-1	3x40mL VOA	$HgCl_2$	002	X									

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
11/29/22	1331				11/29/22	1331
11/29/22	1844	Chastity Walker		courier	11/30/22	7:40

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.

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

December 19, 2022

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

RE: K 12Y 3 Condensate Tank OrderNo.: 2212232

Dear Marc Gentry:

Hall Environmental Analysis Laboratory received 9 sample(s) on 12/6/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-19
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 9:25:00 AM
Lab ID: 2212232-001 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 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	12/12/2022 6:03:00 PM	S93215
Toluene	ND	1.0		µg/L	1	12/12/2022 6:03:00 PM	S93215
Ethylbenzene	ND	1.0		µg/L	1	12/12/2022 6:03:00 PM	S93215
Xylenes, Total	ND	1.5		µg/L	1	12/12/2022 6:03:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%Rec	1	12/12/2022 6:03:00 PM	S93215
Surr: Dibromofluoromethane	95.8	70-130		%Rec	1	12/12/2022 6:03:00 PM	S93215
Surr: Toluene-d8	91.8	70-130		%Rec	1	12/12/2022 6:03:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-24
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 10:05:00 AM
Lab ID: 2212232-002 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 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	12/12/2022 6:26:00 PM	S93215
Toluene	ND	1.0		µg/L	1	12/12/2022 6:26:00 PM	S93215
Ethylbenzene	ND	1.0		µg/L	1	12/12/2022 6:26:00 PM	S93215
Xylenes, Total	ND	1.5		µg/L	1	12/12/2022 6:26:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%Rec	1	12/12/2022 6:26:00 PM	S93215
Surr: Dibromofluoromethane	95.3	70-130		%Rec	1	12/12/2022 6:26:00 PM	S93215
Surr: Toluene-d8	92.4	70-130		%Rec	1	12/12/2022 6:26:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-23
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 10:50:00 AM
Lab ID: 2212232-003 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 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	12/12/2022 6:49:00 PM	S93215
Toluene	ND	1.0		µg/L	1	12/12/2022 6:49:00 PM	S93215
Ethylbenzene	ND	1.0		µg/L	1	12/12/2022 6:49:00 PM	S93215
Xylenes, Total	ND	1.5		µg/L	1	12/12/2022 6:49:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	89.7	70-130		%Rec	1	12/12/2022 6:49:00 PM	S93215
Surr: Dibromofluoromethane	96.9	70-130		%Rec	1	12/12/2022 6:49:00 PM	S93215
Surr: Toluene-d8	90.5	70-130		%Rec	1	12/12/2022 6:49:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-22
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 11:20:00 AM
Lab ID: 2212232-004 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	3.0	1.0		µg/L	1	12/12/2022 7:12:00 PM	S93215
Toluene	ND	1.0		µg/L	1	12/12/2022 7:12:00 PM	S93215
Ethylbenzene	6.2	1.0		µg/L	1	12/12/2022 7:12:00 PM	S93215
Xylenes, Total	20	1.5		µg/L	1	12/12/2022 7:12:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	76.4	70-130		%Rec	1	12/12/2022 7:12:00 PM	S93215
Surr: Dibromofluoromethane	85.6	70-130		%Rec	1	12/12/2022 7:12:00 PM	S93215
Surr: Toluene-d8	101	70-130		%Rec	1	12/12/2022 7:12:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-18
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 11:50:00 AM
Lab ID: 2212232-005 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	1400	50		µg/L	50	12/12/2022 7:35:00 PM	S93215
Toluene	7.4	5.0		µg/L	5	12/12/2022 7:58:00 PM	S93215
Ethylbenzene	190	5.0		µg/L	5	12/12/2022 7:58:00 PM	S93215
Xylenes, Total	270	7.5		µg/L	5	12/12/2022 7:58:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	81.7	70-130		%Rec	5	12/12/2022 7:58:00 PM	S93215
Surr: Dibromofluoromethane	86.4	70-130		%Rec	5	12/12/2022 7:58:00 PM	S93215
Surr: Toluene-d8	95.1	70-130		%Rec	5	12/12/2022 7:58:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** SVE-3
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 12:20:00 PM
Lab ID: 2212232-006 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	140	2.0		µg/L	2	12/12/2022 8:21:00 PM	S93215
Toluene	560	20		µg/L	20	12/13/2022 2:22:00 PM	SL93233
Ethylbenzene	290	20		µg/L	20	12/13/2022 2:22:00 PM	SL93233
Xylenes, Total	1800	30		µg/L	20	12/13/2022 2:22:00 PM	SL93233
Surr: 1,2-Dichloroethane-d4	77.7	70-130		%Rec	2	12/12/2022 8:21:00 PM	S93215
Surr: Dibromofluoromethane	88.6	70-130		%Rec	2	12/12/2022 8:21:00 PM	S93215
Surr: Toluene-d8	111	70-130		%Rec	2	12/12/2022 8:21:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** SVE-1R
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 12:55:00 PM
Lab ID: 2212232-007 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 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	12/12/2022 8:44:00 PM	S93215
Toluene	1.6	1.0		µg/L	1	12/12/2022 8:44:00 PM	S93215
Ethylbenzene	3.7	1.0		µg/L	1	12/12/2022 8:44:00 PM	S93215
Xylenes, Total	25	1.5		µg/L	1	12/12/2022 8:44:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	82.2	70-130		%Rec	1	12/12/2022 8:44:00 PM	S93215
Surr: Dibromofluoromethane	89.8	70-130		%Rec	1	12/12/2022 8:44:00 PM	S93215
Surr: Toluene-d8	95.9	70-130		%Rec	1	12/12/2022 8:44:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** SVE-2
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 1:40:00 PM
Lab ID: 2212232-008 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	900	20		µg/L	20	12/12/2022 9:07:00 PM	S93215
Toluene	ND	20		µg/L	20	12/12/2022 9:07:00 PM	S93215
Ethylbenzene	260	20		µg/L	20	12/12/2022 9:07:00 PM	S93215
Xylenes, Total	1900	30		µg/L	20	12/12/2022 9:07:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	79.0	70-130		%Rec	20	12/12/2022 9:07:00 PM	S93215
Surr: Dibromofluoromethane	88.6	70-130		%Rec	20	12/12/2022 9:07:00 PM	S93215
Surr: Toluene-d8	94.2	70-130		%Rec	20	12/12/2022 9:07:00 PM	S93215

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

Qualifiers:

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

Analytical Report
Lab Order **2212232**
Date Reported: **12/19/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: K 12Y 3 Condensate Tank **Collection Date:** 11/30/2022 2:20:00 PM
Lab ID: 2212232-009 **Matrix:** AQUEOUS **Received Date:** 12/6/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	970	50		µg/L	50	12/12/2022 9:30:00 PM	S93215
Toluene	ND	50		µg/L	50	12/12/2022 9:30:00 PM	S93215
Ethylbenzene	260	50		µg/L	50	12/12/2022 9:30:00 PM	S93215
Xylenes, Total	1800	75		µg/L	50	12/12/2022 9:30:00 PM	S93215
Surr: 1,2-Dichloroethane-d4	80.5	70-130		%Rec	50	12/12/2022 9:30:00 PM	S93215
Surr: Dibromofluoromethane	85.3	70-130		%Rec	50	12/12/2022 9:30:00 PM	S93215
Surr: Toluene-d8	97.1	70-130		%Rec	50	12/12/2022 9:30:00 PM	S93215

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212232**

19-Dec-22

Client: ENSOLUM

Project: K 12Y 3 Condensate Tank

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **S93215**	RunNo: **93215**
Prep Date:	Analysis Date: **12/12/2022**	SeqNo: **3359370** 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	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.9	70	130			
Surr: Toluene-d8	9.2		10.00		92.0	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **S93215**	RunNo: **93215**
Prep Date:	Analysis Date: **12/12/2022**	SeqNo: **3359371** 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	9.3		10.00		92.6	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.9	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.9	70	130			
Surr: Toluene-d8	9.1		10.00		90.6	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL93233**	RunNo: **93233**
Prep Date:	Analysis Date: **12/13/2022**	SeqNo: **3360978** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	8.3		10.00		83.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.4	70	130			
Surr: Toluene-d8	9.2		10.00		92.1	70	130			

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL93233**	RunNo: **93233**
Prep Date:	Analysis Date: **12/13/2022**	SeqNo: **3360979** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212232**

19-Dec-22

Client: ENSOLUM

Project: K 12Y 3 Condensate Tank

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL93233**	RunNo: **93233**
Prep Date:	Analysis Date: **12/13/2022**	SeqNo: **3360979** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.0	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.3	70	130			
Surr: Toluene-d8	8.9		10.00		89.3	70	130			

Qualifiers:

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

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** Work Order Number: **2212232** RcptNo: **1**

Received By: **Juan Rojas** **12/6/2022 7:30:00 AM**

Completed By: **Desiree Dominguez** **12/6/2022 10:25:28 AM**

Reviewed By: JR 12/6/22 JR 12/6/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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: JH 12-6-22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande, Suite A

Phone #:

email or Fax#: mgentry@ensolum.com, ldaniell@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: K-12Y#3 Condensate Tank

Project #: 05B1226001

Project Manager: M. Gentry

Sampler:

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp(Including CF): 1.5+0.2=1.3 (°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. 2212232	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)
11/30/22	9:25	W	MW-19	3x40mL VOA	$HgCl_2$	-001	X									
	10:05	W	MW-24			-002	X									
	10:50	W	MW-23			-003	X									
	11:20	W	MW-22			-004	X									
	11:50	W	MW-18			-005	X									
	12:20	W	SVE-3			-006	X									
	12:55	W	SVE-1R			-007	X									
	13:40	W	SVE-2			-008	X									
	14:20	W	MW-2			-009	X									

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
11/30/22	09:53				11/30/22	953
12/5/22	1856			Courier	12/6/22	7:30

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.

ENSOLUM

APPENDIX F

New Mexico Office of the State Engineer Permit Approval

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Mike A. Hamman, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

May 12, 2022

Tom Long
Enterprise Products
614 Reilly Ave.
Farmington, NM 87401

RE: Permit Approval to Drill Wells With No Water Right, SJ-4075 POD22-POD24, Enterprise Products, K-12 Y#3 Condensate Tank Release Investigation

Dear Mr. Long:

On April 21, 2022, the New Mexico Office of the State Engineer (NMOSE) received an application to drill three new soil borings and install three associated groundwater monitoring wells associated with the above referenced location. Enclosed is a copy of the above numbered permit, which has been approved subject to the conditions set forth on the approval page and in the attached Conditions of Approval.

A standardized plugging method for the future abandonment of the seven newly permitted wells has also been included in the Conditions of Approval. This eliminates the need to submit a separate Well Plugging Plan of Operations for approval by the NMOSE prior to plugging, unless an alternate plugging method is proposed, required by a separate oversight agency, necessary due to incompatibility with actual conditions, or artesian conditions are encountered. Please be aware that there are deadlines to submit well records for the newly installed monitoring wells and plugging records for any abandoned wells. These deadlines can be found in the attached Conditions of Approval. The well and plugging records should be sent to the NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 383-4751.

Sincerely,

Miles Juett
Assistant Watermaster
Water Rights Division District V

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4075 File
WATERS
Marc Gentry, Ensolum, LLC, via email: mgentry@ensolum.com

File No. SJ-4075 POD22-24

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☒ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☒ Temporary Request - Requested Start Date: 5/16/22 Requested End Date: Unknown

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

1. APPLICANT(S)

Name: Enterprise Products Company	Name: Ensolum, LLC
Contact or Agent: Thomas Long check here if Agent ☐	Contact or Agent: Marc Gentry check here if Agent ☒
Mailing Address: 614 Reilly Ave.	Mailing Address: 10333 Harwin Drive, Suite 470
City: Farmington	City: Houston
State: New Mexico Zip Code: 87401	State: Texas Zip Code: 77036
Phone: 505-215-4727 ☐ Home ☒ Cell Phone (Work):	Phone: 832-978-7700 ☐ Home ☒ Cell Phone (Work):
E-mail (optional): tjlong@eprod.com	E-mail (optional): mgentry@ensolum.com

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2022 APR 21 PM 12 03

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No. SJ-4075 POD22-24	Trn. No.:	Receipt No.: 5-7033
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date: 5-12-2022	

2. **WELL(S)** Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

■ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
see attached "A"	see attached	see attached	see attached

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ **Yes** ■ **No** **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:
see attached well location spreadsheet "Attachment A"

Well is on land owned by: United States Bureau of Land Management

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ■ **Yes** ☐ **No**
If yes, how many 3

Approximate depth of well (feet): 40	Outside diameter of well casing (inches): 2.25
Driller Name: Enviro-Drill, Inc.	Driller License Number: WD-1186

3. **ADDITIONAL STATEMENTS OR EXPLANATIONS**

Enterprise proposes to install three monitoring wells to further delineate the extent of hydrocarbon impact to soil and/or groundwater at the site. The proposed monitoring well will be completed utilizing a hollow stem auger drilling rig.

Low flow or bailer sampling methods will be utilized to sample the monitoring wells, resulting in minimal water removal.

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No. SJ-4075 POD22-24	Trn No.:

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☐ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ■ Include the reason for the monitoring well, and, ■ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Thomas J. Long
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Thomas J. Long
Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 12 day of May 20 22, for the State Engineer,

Mike A. Hamman, P.E., State Engineer

By: Miles Juett
Signature Print

Title: Assistant Watermaster
Print

2022 APR 21 P1:15 OM

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: SJ-4075 POD22-24	Trn No.:

"Attachment A"

POD Number	Well Number (If Known)	Existing, New, or Proposed	X or Easting or Longitude:	Y or Northing or Latitude:	Public Land Survey System (PLSS)	Well Diameter (inches)	Approximte Well Depth (feet)	Approximate Depth to Water (feet)	Driller	Driller #	Comments
SJ-4075 POD22	SB-22/MW-22	Proposed	-107.549518	36.554625	SW 1/4 of SW 1/4, S23 T27N R7W	2	40	28	Enviro-Drill Inc	WD-1186	
SJ-4075 POD23	SB-23/MW-23	Proposed	-107.549738	36.554614	SW 1/4 of SW 1/4, S23 T27N R7W	2	40	28	Enviro-Drill Inc	WD-1186	
SJ-4075 POD24	SB-24/MW-24	Proposed	-107.54973	36.554393	SW 1/4 of SW 1/4, S23 T27N R7W	2	40	28	Enviro-Drill Inc	WD-1186	

"Attachment B"

Monitoring:

- **Include the reason for the monitoring well.**

Monitoring events will be conducted at the site to evaluate constituent of concern (COC) concentrations in the groundwater over time. Low flow or bailer sampling method will be utilized to sample the wells, resulting in minimal water removal.

- **The duration of the planned monitoring.**

Monitoring will occur until the site in fully remediated.

NMOSE Permit to Drill a Well(s) With No Water Right - Conditions of Approval
SJ-4075 POD22 – POD24

The New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application approval (i.e., permit) is further subject to the following conditions of approval.

1. This permit is approved as follows:

Permittee(s): Enterprise Products Company
(ENSOLUM, as Agent)
614 Reilly Ave
Farmington, NM 87401

Permit Number: SJ-4075

Application File Date: April 21, 2022

Priority: N/A

Source: Groundwater

Point(s) of Diversion: SJ-4075 POD22 through POD24 includes three newly proposed groundwater monitoring wells associated with a site investigation for the K-12 Y#3 Condensate Tank Release, located on federal land managed by the Bureau of Land Management in Rio Arriba County, New Mexico. The wells (aka, point of diversion; POD) will be located within the SW¼ SW¼ of Section 23, Township 27 North, Range 7 West, NMPM, at the following approximate point locations (Lat/Long).

POD Number and Owner's Well Name	Casing: Diameter (inches) and Depth (feet)		Longitude (DD)	Latitude (DD)
SJ-4075 POD22 (SB-22/MW-22)	2	40	-107.549518	36.554625
SJ-4075 POD23 (SB-23/MW-23)	2	40	-107.549738	36.554614
SJ-4075 POD24 (SB-24/MW-24)	2	40	-107.54973	36.554393

Purpose of Use: Groundwater monitoring

Place of Use: N/A

Amount of Water: N/A

2. No water shall be appropriated and beneficially used from any wells or borings approved under this permit.

3. No water shall be diverted from the well(s) except for initial well development and periodic sampling purposes. Upon completion of monitoring activities the well(s) shall be plugged in

accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited.

6. In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30 and 19.27.4.31 NMAC. However, pursuant to 72-12-12 NMSA 1978 and 19.27.4.8 NMAC, a driller's license is not required for the construction of a driven well with an outside casing diameter of 2⅜ inches or less and that does not require the use of a drill rig (e.g., auger) for installation. This exemption is not applicable to well plugging.

7. The permittee has not stated whether artesian conditions are likely to be encountered at the proposed well/borehole location(s). However, if artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

8. A Well Record documenting the as-built well construction and materials used shall be filed for each of the new wells in accordance with Subsection N of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 30 days after completion of the well(s)**. Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit.

9. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

10. When the permittee receives approval or direction to permanently abandon the well(s)/borehole(s) covered by this permit, plugging shall be performed by a New Mexico licensed well driller. The well(s)/borehole(s) shall be plugged pursuant to Subsection C of 19.27.4.30 NMAC using the following method, unless an alternate plugging method has been proposed by or on behalf of the well owner and approved by the NMOSE. If a well/borehole has encountered artesian conditions, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities concerning artesian wells. Additionally, if the following standardized plugging sealant is not appropriate for use due to incompatibility with the water quality or any soil and water contaminates encountered, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities.

a. Obstructions in a well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

b. Prior to plugging, calculate the theoretical volume of sealant needed for abandonment of the well/borehole based on the actual measured pluggable depth of the well/borehole and the volume factor for the casing/borehole diameter. Compare the actual volume of sealant placed in the well/borehole with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

c. Portland Type I/II cement shall be used for the plugging sealant. The water mixed with the cement to create the plugging sealant shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. Up to a maximum of 6.0 gallons per 94-lb sack is acceptable to allow for greater pumpability.

Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. If a bentonite additive is used, the following rates and mixing guidelines shall be followed. For a rate or a mixing procedure other than that provided below, the NMOSE District V office must be contacted for pre-approval. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of 5.2 gallons water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

d. Placement of the sealant within the well/borehole shall be by pumping through a tremie pipe extended to near the bottom of the well/borehole and kept below the top of the slurry column (i.e., immersed in the slurry) as the well/borehole is plugged from bottom upwards in a manner that displaces the standing water column.

e. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface may be filled with native soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

f. **Within 30 days after completion of well/borehole plugging, a complete Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well/boring plugged. The Well Plugging Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The required well plugging record form is available at https://www.ose.state.nm.us/Statewide/wdForms.php.

11. In accordance with Subsection C of 19.27.4.30 NMAC, a well/borehole that does not encounter groundwater may be immediately plugged by filling with drill cuttings or clean native fill to within 10 feet of land surface and by plugging the remaining 10 feet to the land surface with a

sealant approved by the Office of the State Engineer. A Plugging Record shall be filed with the State Engineer as described above.

12. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

13. Pursuant to 72-12-3 NMSA 1978, the applicant may or may not have provided written documentation with the application, which the applicant claims as confirmation that access has been granted for the aforementioned well(s) to be located on property owned by someone other than the well owner/applicant. NMOSE approval of this permit in no way infers the right of access to land not owned by the well owner/applicant.

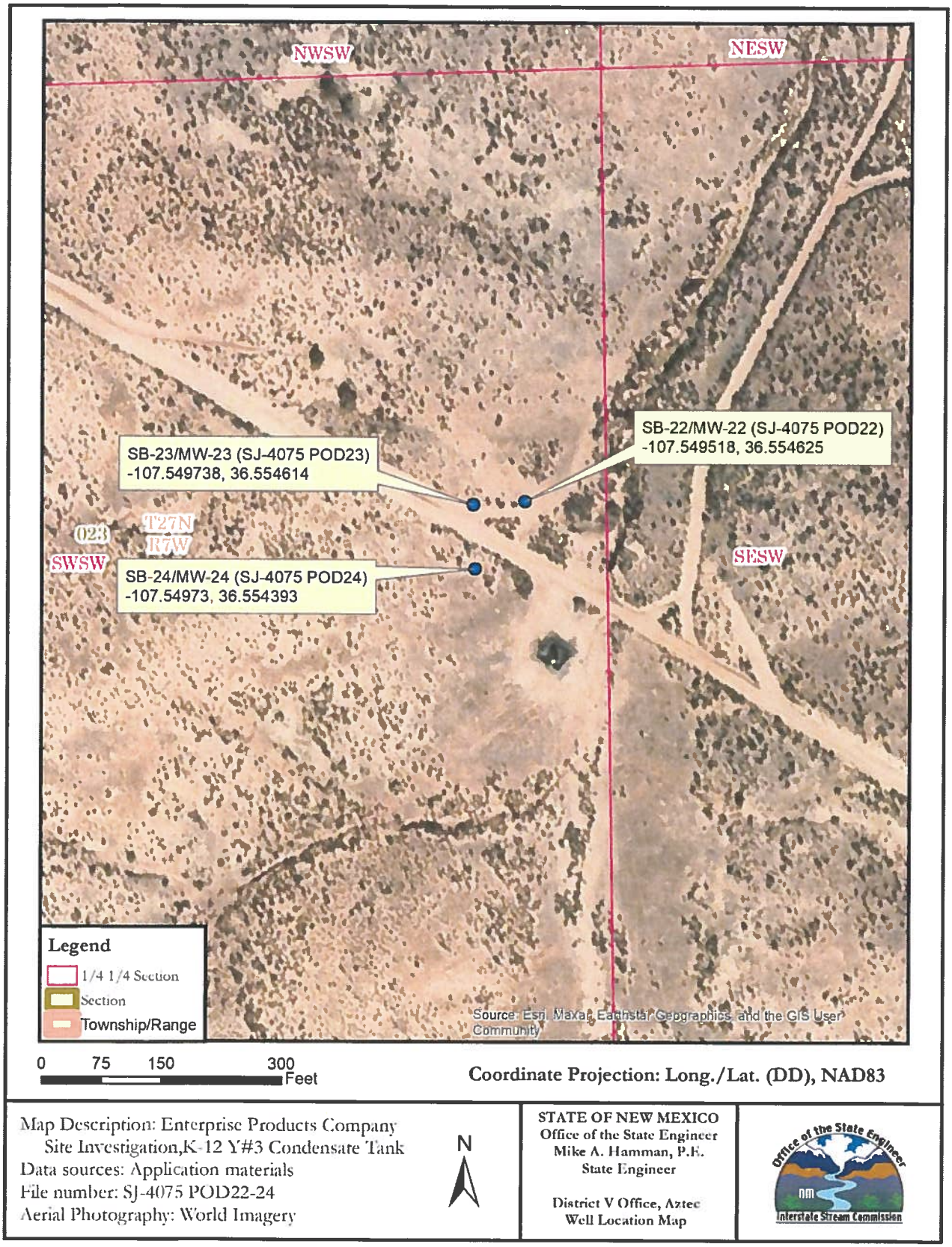
14. The State Engineer retains jurisdiction of this permit.

The application for drilling well(s) SJ-4075 POD22-POD24 without a water right, submitted on April 21, 2022, is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

Witness my hand and seal this 12th day of May, A.D. 2022.
Mike A. Hamman, P.E., State Engineer

By: Miles Juett

Miles Juett, Assistant Watermaster
District V Office, Water Rights Division



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District III
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District IV
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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 350363

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 350363
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Monitoring Report for Lateral K-12 Y#3 Condensate Tank Release: Content Satisfactory 1. Continue to conduct semi-annual groundwater monitoring events as scheduled until constituents are below the allowable concentrations, and then increase sampling frequency to quarterly. 2. Continue to evaluate monthly product recovery. 3. Evaluate in-situ soil remediation options and propose one to OCD. 4. MW-1 may be P&A'd but must be re-drilled and installed as MW-1R adjacent to MW-1 as groundwater flow is semi-radial to the east, northwest and north, that monitoring point is significant. Redrill MW-1 to the appropriate depth in sixty (60) days from 06/14/2024. 5. Submit the groundwater monitoring report for 2024 by April 1, 2025.	6/14/2024