



## 2022 Groundwater Monitoring Report

**REVIEWED**

By Mike Buchanan at 1:17 pm, Jun 13, 2024

Property:

**Masden Gas Com #1E (02/05/15)**

Unit Letter C, S28 T29N R11W  
San Juan County, New Mexico

Review of the Masden Gas Com #1E 2022 Groundwater Monitoring Report: Content Satisfactory

1. Continue to conduct groundwater sampling on a quarterly basis for constituents of concern BTEX.

2. Once eight (8) consecutive quarterly sampling analyses demonstrate COCs below the allowable concentrations in the WQCC, a one-time vadose zone sampling plan must be submitted to OCD as per 19.15.30.9 paragraph D.

3. Resume groundwater pumping and disposal events as necessary.

4. Submit the 2024 Annual Report to OCD by April 1, 2025.

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

**February 13, 2023**

Ensolum Project No. 05A1226026

Prepared for:

**Enterprise Field Services, LLC**

614 Reilly Avenue  
Farmington, New Mexico 87401  
Attn: Mr. Thomas Long

Prepared by:

Raneer Deechilly  
Project Manager

Kyle Summers  
Senior Managing Geologist

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## 1.0 INTRODUCTION

This report describes the groundwater monitoring activities conducted at the Masden Gas Com #1E (02/05/15) site, referred to hereinafter as the "Site", during 2022.

### 1.1 Site Description & Background

<b>Operator:</b>	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
<b>Site Name:</b>	Masden Gas Com #1E (02/05/15)
<b>NM EMNRD OCD Incident ID No.</b>	nCS1507252223
<b>Location:</b>	36.70096° North, 108.00164° West Unit Letter C, Section 28, Township 29 North, Range 11 West Bloomfield, San Juan County, New Mexico
<b>Property:</b>	Private Land
<b>Regulatory:</b>	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 constituent of concern (COC) 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 to 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 (*Masden Gas Com #1E Monitoring Well Installation & Sampling Report*, 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 2021 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 GQs. 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)).

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 New Mexico Administrative Code (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 GQs that are identified in 20.6.2 NMAC to evaluate groundwater conditions.

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.

## 2.0 GROUNDWATER MONITORING

Ensolum conducted groundwater sampling events during January 2022, April 2022, July 2022, and October 2022. 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 ( $\text{HgCl}_2$ )), labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The groundwater samples were relinquished to the courier for Hall Environmental Analysis Laboratory (HEAL) of Albuquerque, New Mexico under proper chain-of-custody procedures.

## 2.1 Groundwater Laboratory Analytical Methods

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

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	20	SW-846 8021 or 8260

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

## 2.2 Groundwater Flow Direction

The groundwater flow direction at the Site generally trends toward the southwest. The calculated gradient during the 2022 monitoring events varied from approximately 0.0016 feet per foot (ft/ft) to 0.004 ft/ft across the Site. Groundwater elevation data collected during the 2022 gauging events are presented in **Table 2 (Appendix C)**. Groundwater gradient maps for the 2022 gauging events are included as **Figure 4A through 4D (Appendix A)**.

## 2.3 Groundwater Data Evaluation

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

monitoring wells during the 2022 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** through **5D** of **Appendix A**.

- The January, April, July, and October 2022 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 micrograms per liter (µg/L).
- The January, April, July, and October 2022 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, April, July, and October 2022 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, April, July, and October 2022 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 2022 analytical results.

July 2022 and October 2022 Data Qualifier Flags		
Sample ID	Data Qualifier Flag	Comments/Reactions
MW-1 (collected 7/22/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.
MW-2R (collected 7/22/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.
MW-3 (collected 7/22/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.
MW-4 (collected 7/22/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.
MW-5 (collected 7/22/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.



MW-2R (collected 10/19/2022)	SW-846 Method 8021 BTEX Surrogate Recovery was outside the accepted recovery limits.	The BTEX data is suitable for use as an estimated value. The BTEX Surrogate recovery was slightly outside the acceptable recovery range due to matrix interference.
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### 3.0 FINDINGS

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

- The groundwater flow direction at the Site is generally towards the southwest, with a gradient that varied from 0.0016 ft/ft to 0.004 ft/ft across the Site.
- The 2022 groundwater samples do not exhibit COC concentrations above the applicable WQCC GQSs.

### 4.0 RECOMMENDATIONS

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

- Report the groundwater monitoring data to the New Mexico EMNRD OCD.
- Continue quarterly groundwater monitoring at the Site. If no WQCC GQS exceedances are encountered during eight consecutive quarterly sampling events, Enterprise will request closure.
- If conditions warrant in the future, resume groundwater pumping and disposal events.

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

#### 5.1 Standard of Care

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

#### 5.2 Limitations

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

at actual sample locations. Ensolum's findings and recommendation are based solely upon data available to Ensolum at the time of these services.

### **5.3 Reliance**

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

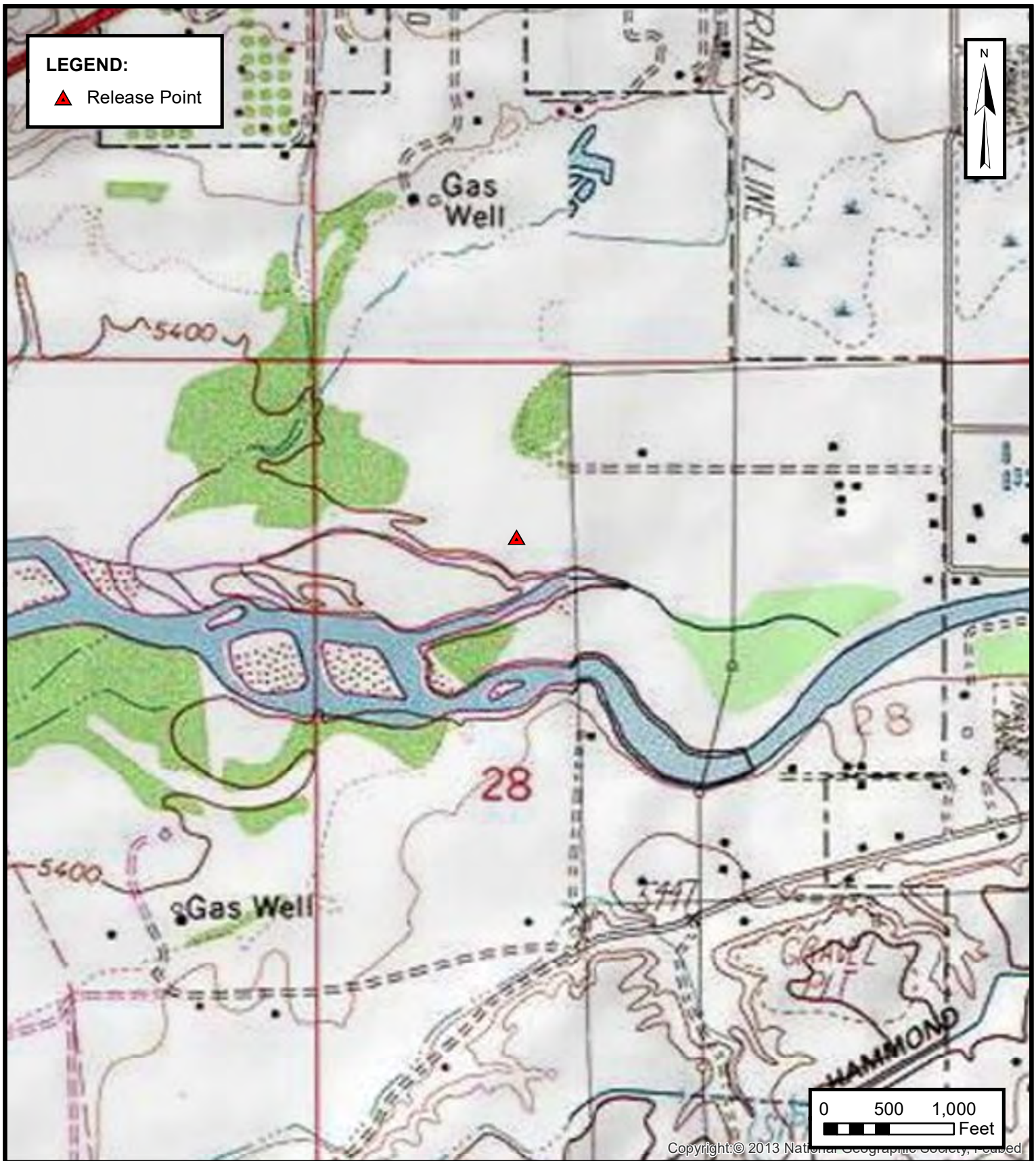




# APPENDIX A

## Figures

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**TOPOGRAPHIC MAP**

ENTERPRISE FIELD SERVICES, LLC  
MASDEN GAS COM #1E (02/05/15)  
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico  
36.70096° N, 108.00164° W

PROJECT NUMBER: 05A1226026

**FIGURE****1**





## SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC  
 MASDEN GAS COM #1E (02/05/15)  
 Unit Letter C, S28 T29N R11W, San Juan County, New Mexico  
 36.70096° N, 108.00164° W

PROJECT NUMBER: 05A1226026

**FIGURE**  
**2**





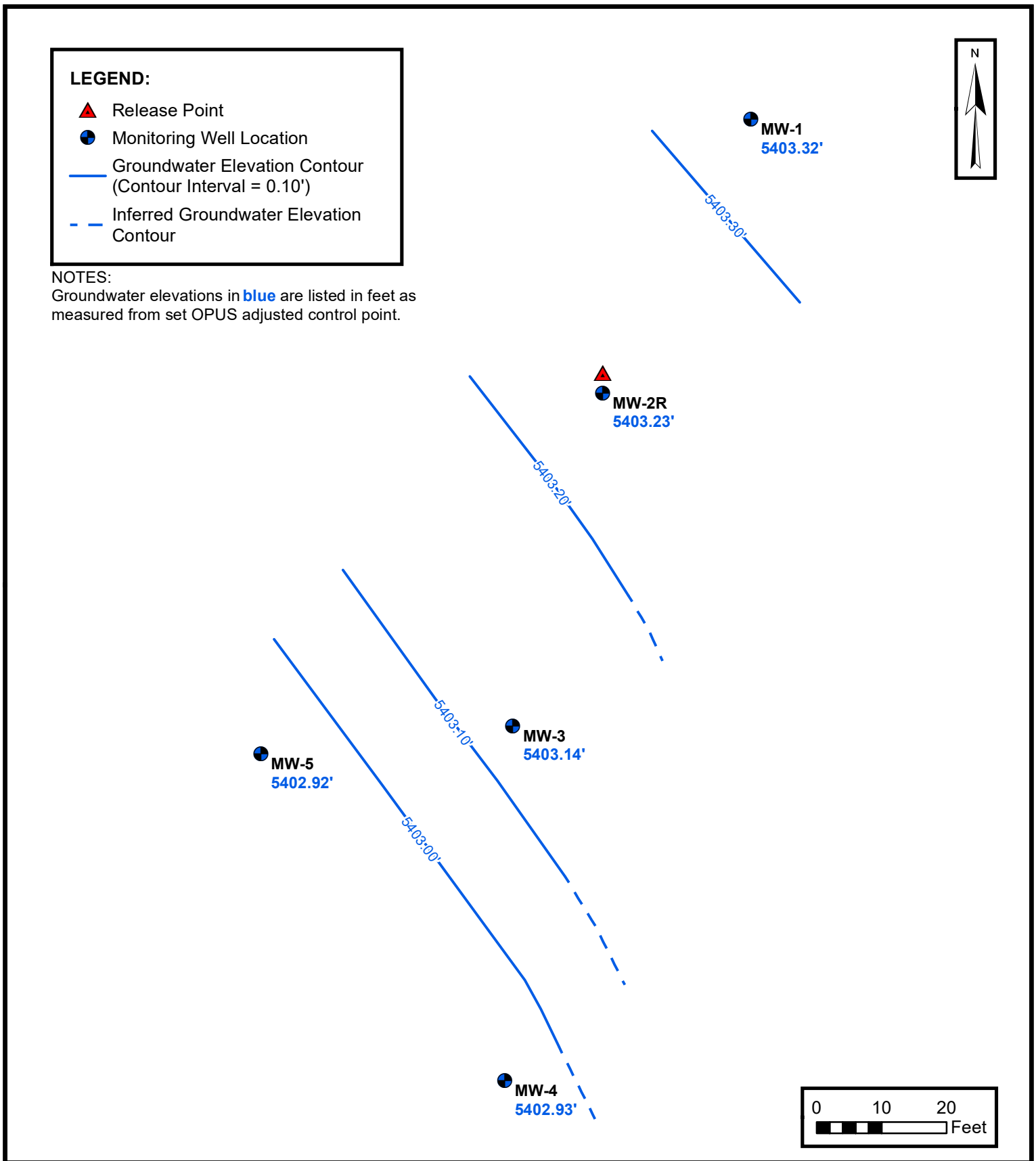
**SITE MAP**

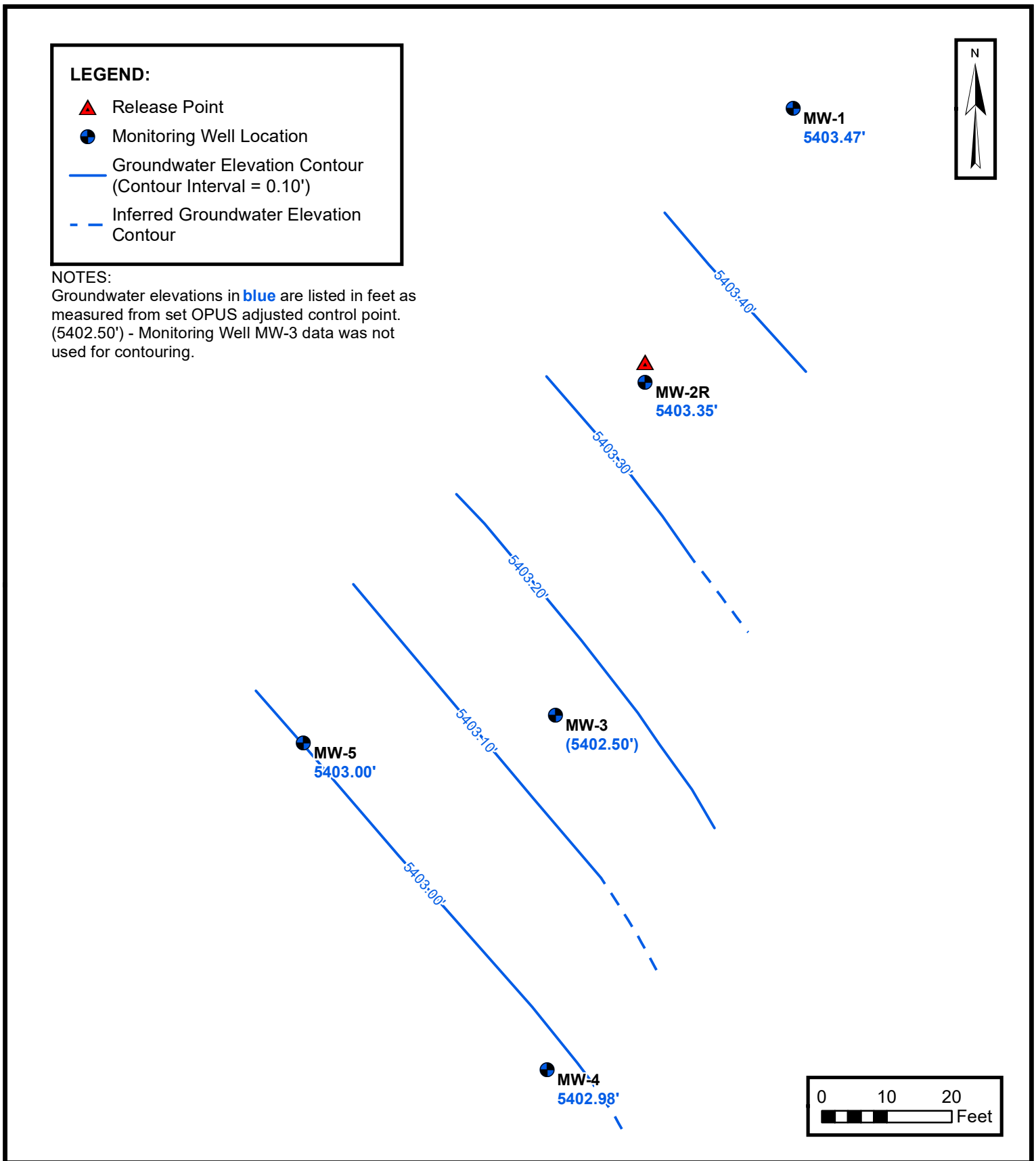
ENTERPRISE FIELD SERVICES, LLC  
MASDEN GAS COM #1E (02/05/15)  
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico  
36.70096° N, 108.00164° W

PROJECT NUMBER: 05A1226026

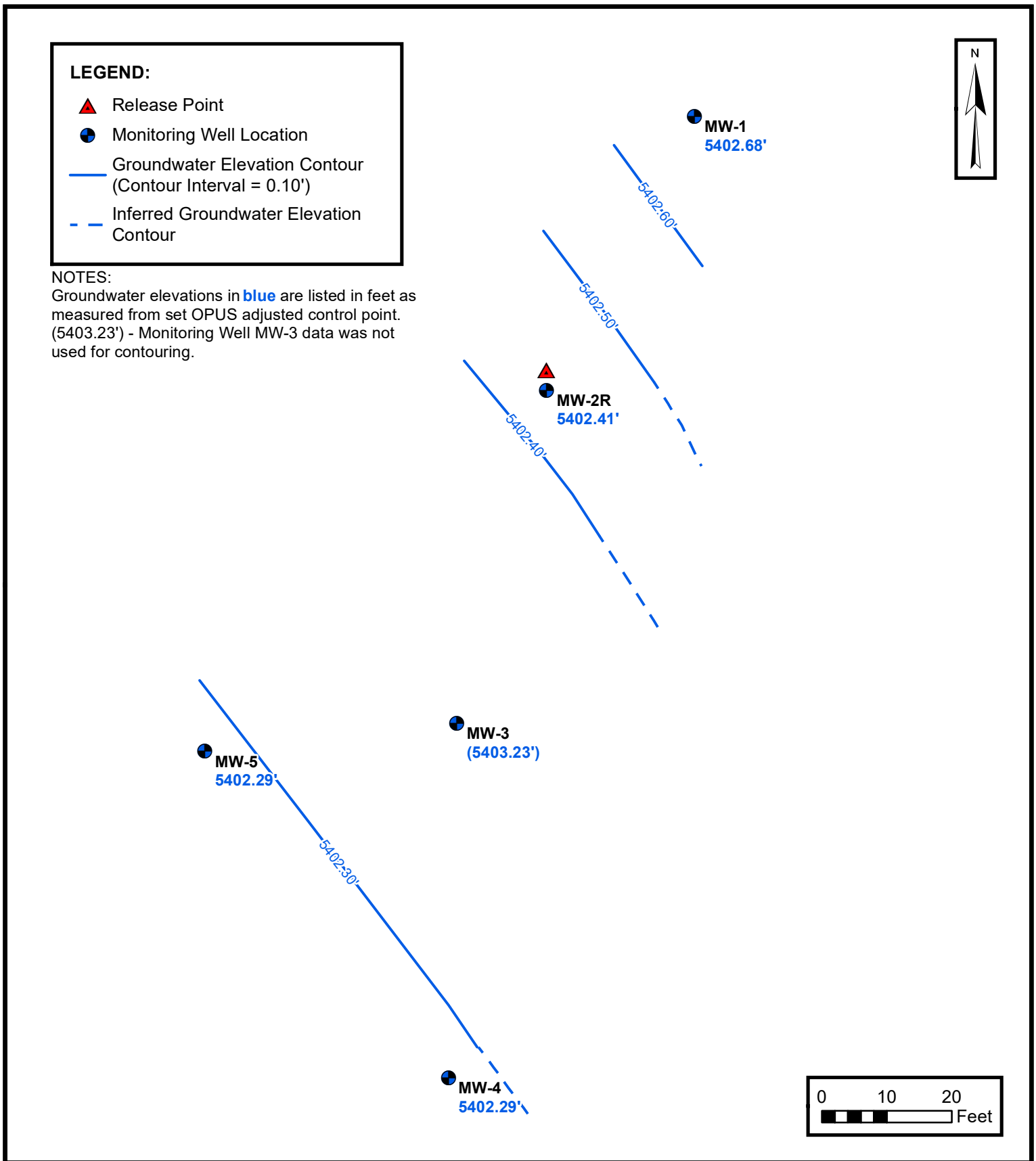
**FIGURE**

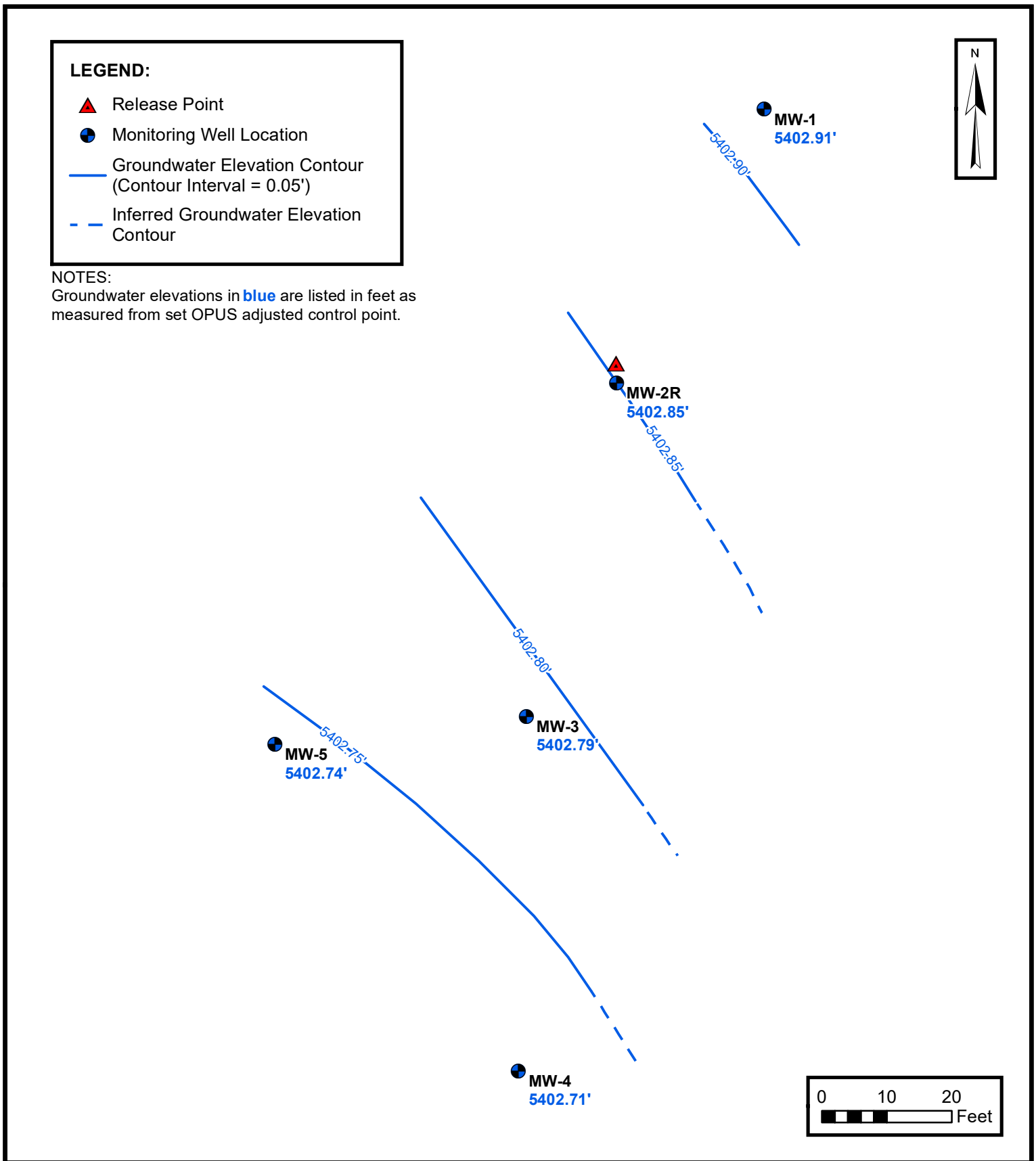
**3**

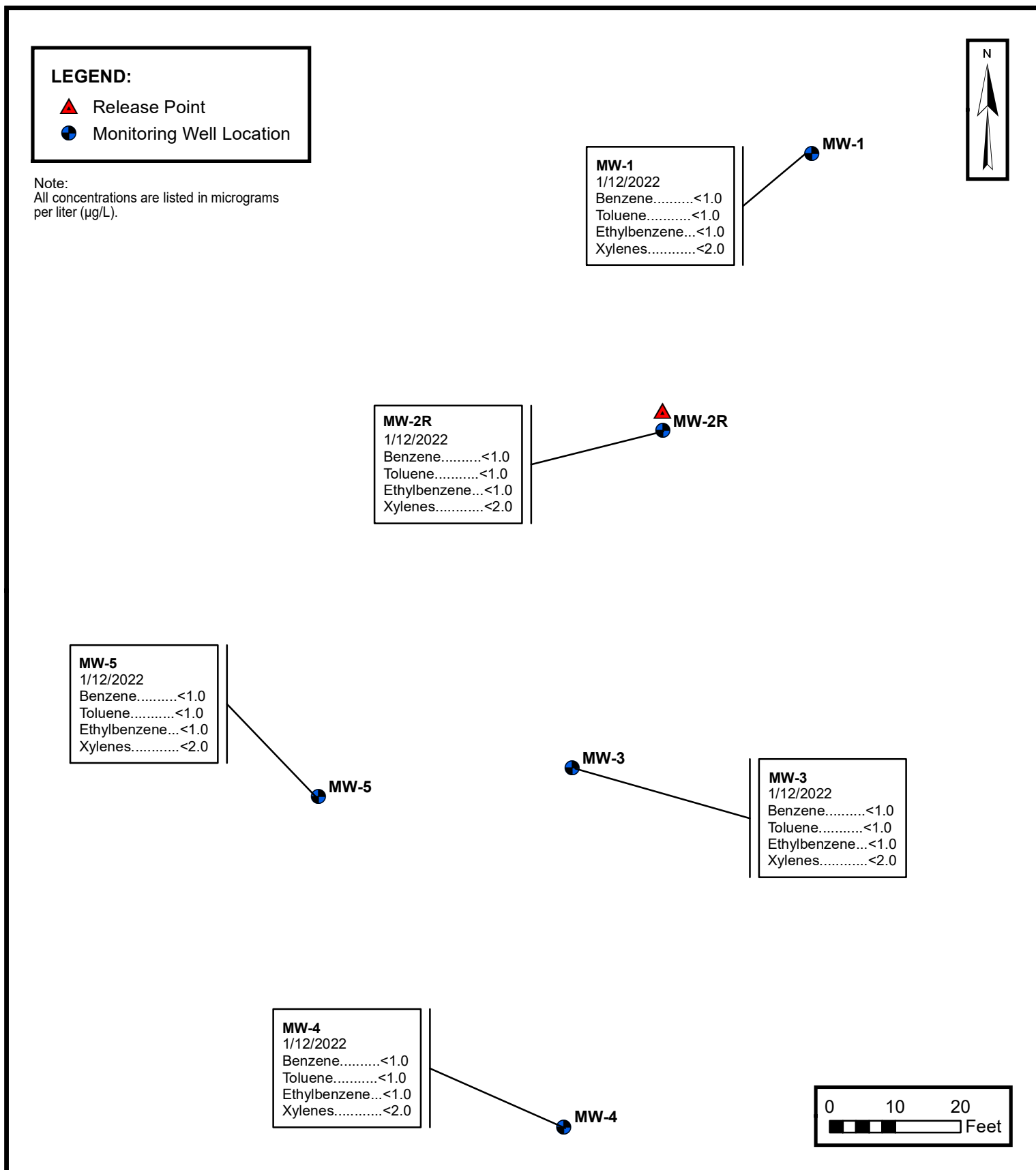












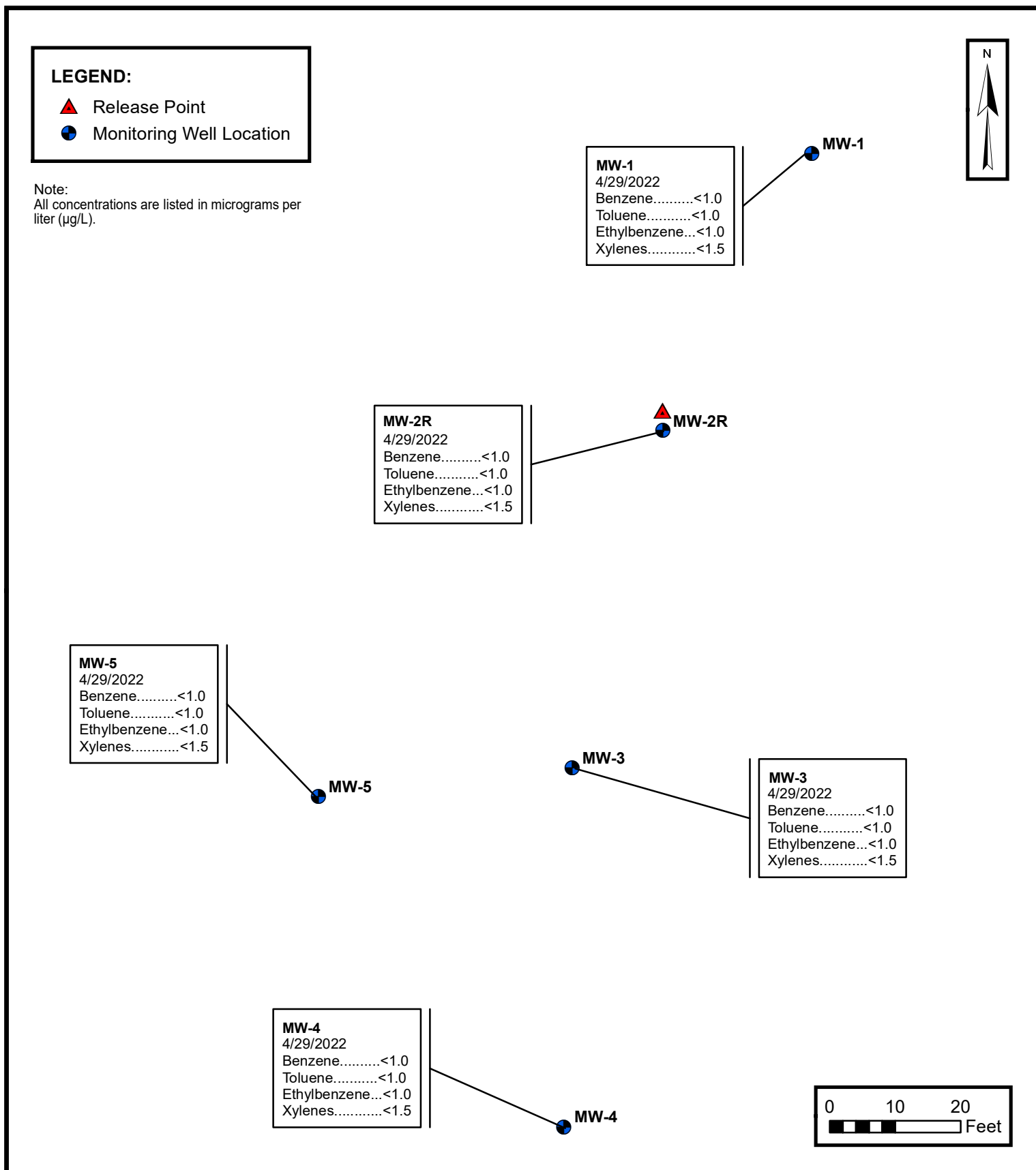
**GROUNDWATER ANALYTICAL DATA MAP  
(JANUARY 2022)**

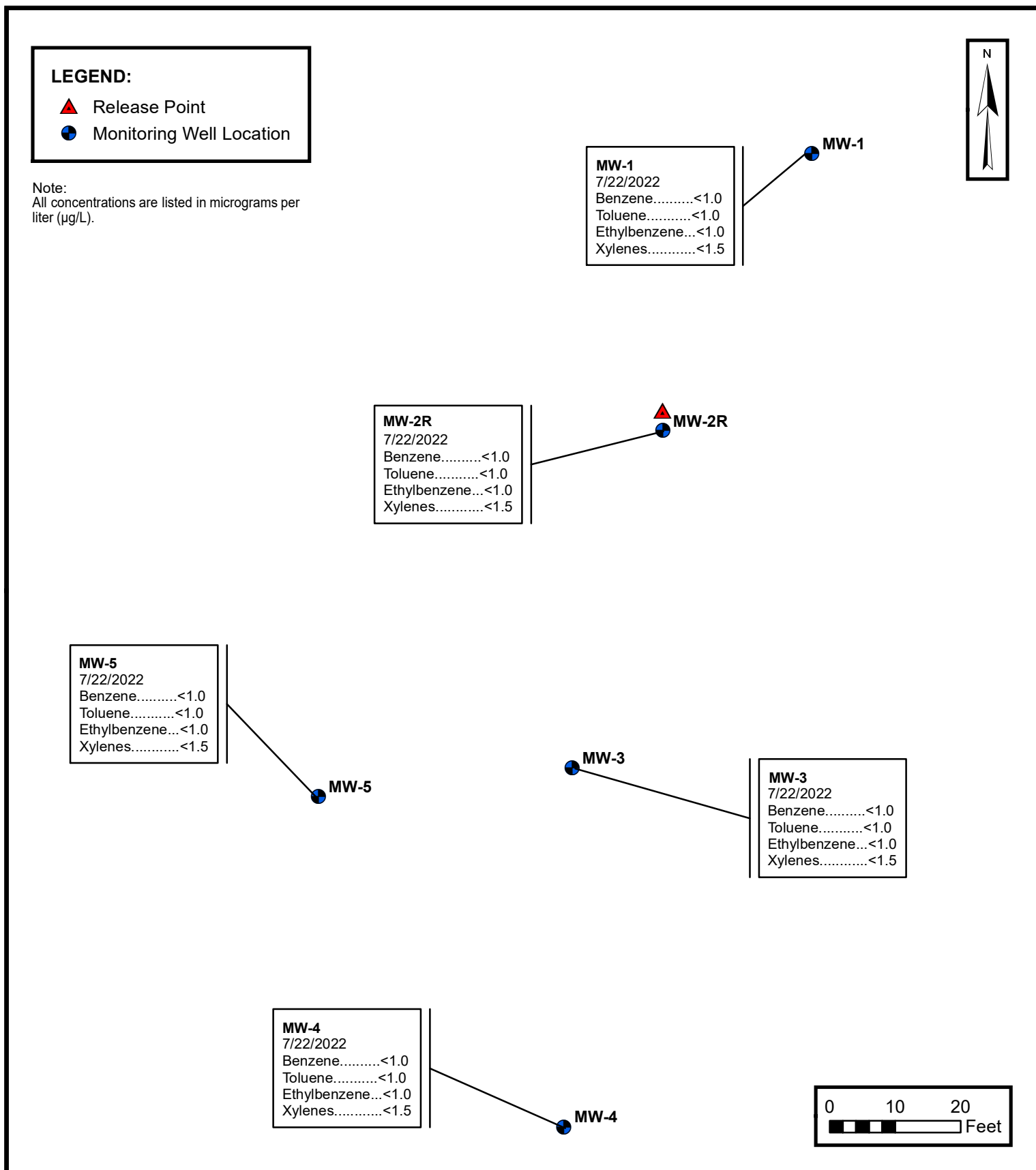
ENTERPRISE FIELD SERVICES, LLC  
 MASDEN GAS COM #1E (02/05/15)  
 Unit Letter C, S28 T29N R11W, San Juan County, New Mexico  
 36.70096° N, 108.00164° W

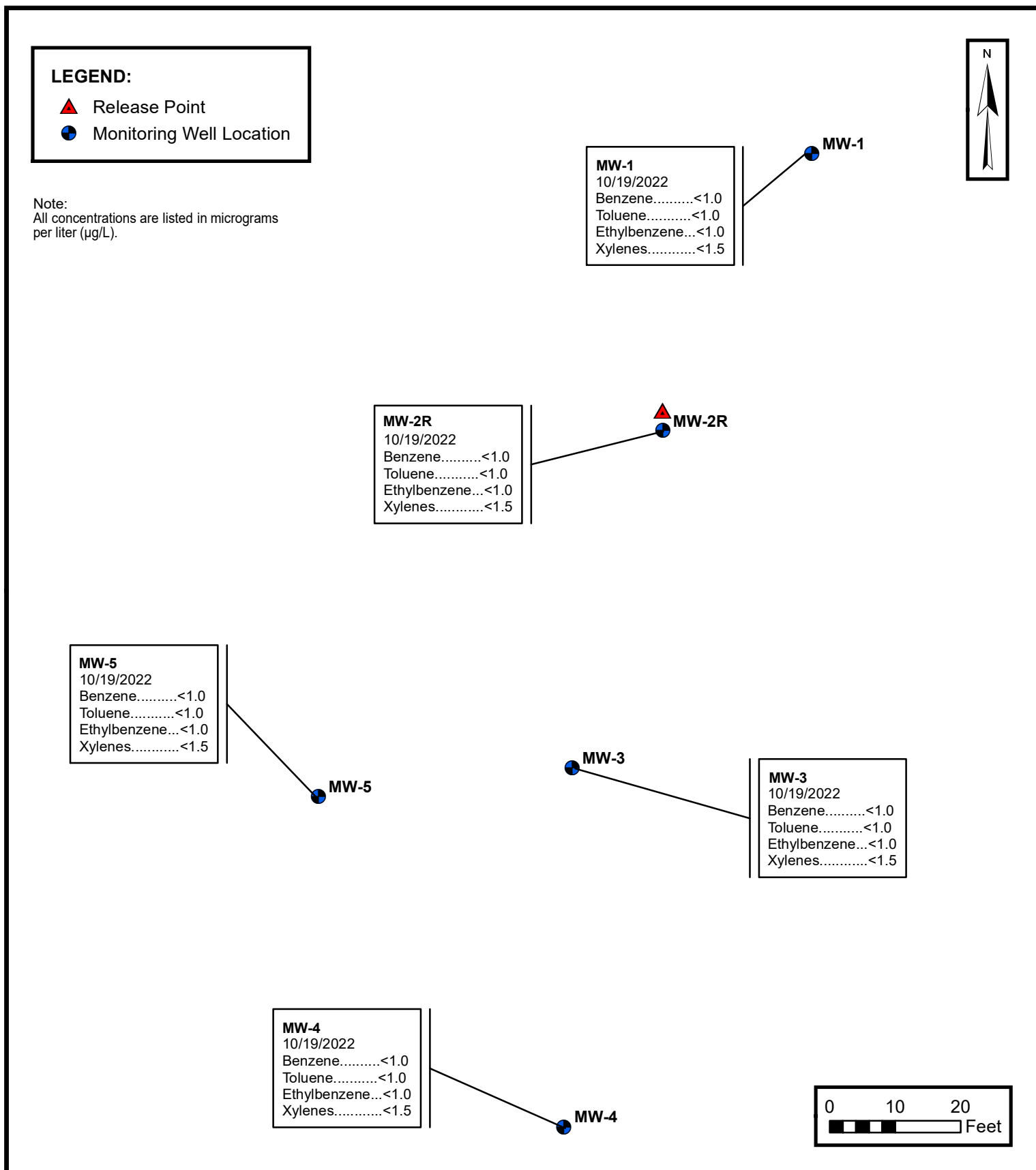
PROJECT NUMBER: 05A1226026

**FIGURE  
5A**









**GROUNDWATER ANALYTICAL DATA MAP  
(OCTOBER 2022)**

ENTERPRISE FIELD SERVICES, LLC  
MASDEN GAS COM #1E (02/05/15)  
Unit Letter C, S28 T29N R11W, San Juan County, New Mexico  
36.70096° N, 108.00164° W

PROJECT NUMBER: 05A1226026

**FIGURE  
5D**







## 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:** Tuesday, January 10, 2023 10:50:00 AM

---

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](mailto: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](mailto:tjlong@eprod.com)



---

**From:** Velez, Nelson, EMNRD <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>  
**Sent:** Tuesday, July 19, 2022 10:06 AM  
**To:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>; Kyle Summers <[ksummers@ensolum.com](mailto: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](mailto: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](mailto:tjlong@eprod.com)>  
**Sent:** Tuesday, July 19, 2022 9:45 AM

**To:** Velez, Nelson, EMNRD <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>; Kyle Summers <[ksummers@ensolum.com](mailto: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](mailto:tjlong@eprod.com)



---

**From:** Long, Thomas  
**Sent:** Wednesday, April 27, 2022 8:12 AM  
**To:** 'Velez, Nelson, EMNRD' <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto: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](mailto:tjlong@eprod.com)



---

**From:** Long, Thomas  
**Sent:** Wednesday, April 20, 2022 11:03 AM  
**To:** 'Velez, Nelson, EMNRD' <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>; Kyle Summers <[ksummers@ensolum.com](mailto: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](mailto:tjlong@eprod.com)



---

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

**From:** [Kyle Summers](#)  
**To:** [Landon Daniell](#)  
**Cc:** [Ranee Deechilly](#)  
**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:** Tuesday, July 19, 2022 10:08:56 AM  
**Attachments:** [image003.png](#)  
[image004.png](#)  
[image005.png](#)

---



**Kyle Summers**

Principal

903-821-5603

**Ensolum, LLC**

in f

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**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

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

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](mailto: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](mailto:tjlong@eprod.com)>

**Sent:** Tuesday, July 19, 2022 9:45 AM

**To:** Velez, Nelson, EMNRD <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>

**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>; Kyle Summers <[ksummers@ensolum.com](mailto: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](mailto:tjlong@eprod.com)



---

**From:** Long, Thomas

**Sent:** Wednesday, April 27, 2022 8:12 AM

**To:** 'Velez, Nelson, EMNRD' <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>

**Cc:** Stone, Brian <[bmstone@eprod.com](mailto: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](mailto:tjlong@eprod.com)



---

**From:** Long, Thomas  
**Sent:** Wednesday, April 20, 2022 11:03 AM  
**To:** 'Velez, Nelson, EMNRD' <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>; Kyle Summers <[ksummers@ensolum.com](mailto: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](mailto:tjlong@eprod.com)



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



## APPENDIX C

### Tables

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<b>TABLE 1</b> <b>Masden Gas Com #1E (02/05/15)</b> <b>GROUNDWATER ANALYTICAL SUMMARY</b>						
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 Commission Groundwater Quality Standards		5	1,000	700	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
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					



<b>TABLE 1</b> <b>Masden Gas Com #1E (02/05/15)</b> <b>GROUNDWATER ANALYTICAL SUMMARY</b>						
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 Commission Groundwater Quality Standards		5	1,000	700	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
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





<b>TABLE 1</b> <b>Masden Gas Com #1E (02/05/15)</b> <b>GROUNDWATER ANALYTICAL SUMMARY</b>						
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 Commission Groundwater Quality Standards		5	1,000	700	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



<b>TABLE 1</b> <b>Masden Gas Com #1E (02/05/15)</b> <b>GROUNDWATER ANALYTICAL SUMMARY</b>						
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 Commission Groundwater Quality Standards		5	1,000	700	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

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



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 <sup>1</sup>	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
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						



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



<b>TABLE 2</b> <b>Masden Gas Com #1E (02/05/15)</b> <b>GROUNDWATER ELEVATIONS</b>						
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		5402.71



<b>TABLE 2</b> <b>Masden Gas Com #1E (02/05/15)</b> <b>GROUNDWATER ELEVATIONS</b>						
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		5402.36
	10.27.21	ND	3.18	ND	5405.89	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		5402.74

<sup>1</sup> = Aberrant gauging data

BTOC - below top of casing

AMSL - above mean sea level

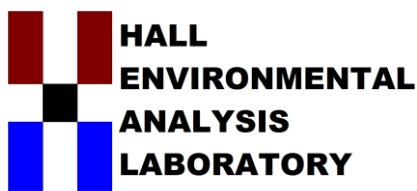
TOC - top of casing



## APPENDIX D

### Laboratory Data Sheets & Chain of Custody Documentation

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

January 17, 2022

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

RE: Masden Gas Com 1E

OrderNo.: 2201514

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 1/13/2022 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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109











## Analytical Report

Lab Order **2201514**

Date Reported: 1/17/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** ENSOLUM AZTEC

**Client Sample ID:** MW-2R

**Project:** Masden Gas Com 1E

**Collection Date:** 1/12/2022 12:30:00 PM

**Lab ID:** 2201514-005

**Matrix:** AQUEOUS

Received Date: 1/13/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	1.0		µg/L	1	1/14/2022 7:12:29 PM	D85163
Toluene	ND	1.0		µg/L	1	1/14/2022 7:12:29 PM	D85163
Ethylbenzene	ND	1.0		µg/L	1	1/14/2022 7:12:29 PM	D85163
Xylenes, Total	ND	2.0		µg/L	1	1/14/2022 7:12:29 PM	D85163
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	1/14/2022 7:12:29 PM	D85163

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

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

Page 5 of 6

## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2201514

17-Jan-22

Client: ENSOLUM AZTEC

Project: Masden Gas Com 1E

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBW</b>	Batch ID: <b>D85163</b>		RunNo: <b>85163</b>							
Prep Date:	Analysis Date: <b>1/14/2022</b>		SeqNo: <b>2996639</b>		Units: <b>µg/L</b>					
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	21		20.00		107	70	130			

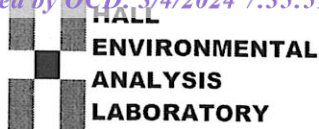
Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>D85163</b>		RunNo: <b>85163</b>							
Prep Date:	Analysis Date: <b>1/14/2022</b>		SeqNo: <b>2996640</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.6	80	120			
Toluene	20	1.0	20.00	0	97.9	80	120			
Ethylbenzene	19	1.0	20.00	0	97.0	80	120			
Xylenes, Total	58	2.0	60.00	0	96.4	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		108	70	130			

Sample ID: <b>2201514-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>MW-5</b>	Batch ID: <b>D85163</b>		RunNo: <b>85163</b>							
Prep Date:	Analysis Date: <b>1/14/2022</b>		SeqNo: <b>2996642</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	80	120			
Toluene	20	1.0	20.00	0	101	80	120			
Ethylbenzene	20	1.0	20.00	0	102	80	120			
Xylenes, Total	61	2.0	60.00	0	101	80	120			
Surr: 4-Bromofluorobenzene	23		20.00		113	70	130			

Sample ID: <b>2201514-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>MW-5</b>	Batch ID: <b>D85163</b>		RunNo: <b>85163</b>							
Prep Date:	Analysis Date: <b>1/14/2022</b>		SeqNo: <b>2996643</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.8	80	120	4.44	20	
Toluene	19	1.0	20.00	0	96.2	80	120	4.63	20	
Ethylbenzene	19	1.0	20.00	0	97.3	80	120	4.22	20	
Xylenes, Total	58	2.0	60.00	0	97.1	80	120	4.18	20	
Surr: 4-Bromofluorobenzene	22		20.00		110	70	130	0	0	

## Qualifiers:

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



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

## Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2201514

RcptNo: 1

Received By: Cheyenne Cason

1/13/2022 8:00:00 AM

*Chase*

Completed By: Sean Livingston

1/13/2022 8:54:05 AM

*Sean Livingston*Reviewed By: *JN 1/13/22*Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: *KPG 1/13/22*

Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good				



Bill to Ensolium

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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 09, 2022

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

RE: Masden Gas Com 1E

OrderNo.: 2205005

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/30/2022 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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 2205005

Date Reported: 5/9/2022

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM AZTEC  
**Project:** Masden Gas Com 1E

**Lab Order:** 2205005

**Lab ID:** 2205005-001

**Collection Date:** 4/29/2022 9:15:00 AM

**Client Sample ID:** MW-5

**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/5/2022 12:17:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 12:17:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 12:17:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 12:17:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	5/5/2022 12:17:00 AM	SL8771
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/5/2022 12:17:00 AM	SL8771
Surr: Toluene-d8	97.7	70-130		%Rec	1	5/5/2022 12:17:00 AM	SL8771

**Lab ID:** 2205005-002

**Collection Date:** 4/29/2022 9:55:00 AM

**Client Sample ID:** MW-4

**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/5/2022 1:26:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 1:26:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 1:26:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 1:26:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	5/5/2022 1:26:00 AM	SL8771
Surr: Dibromofluoromethane	105	70-130		%Rec	1	5/5/2022 1:26:00 AM	SL8771
Surr: Toluene-d8	94.9	70-130		%Rec	1	5/5/2022 1:26:00 AM	SL8771

**Lab ID:** 2205005-003

**Collection Date:** 4/29/2022 10:15:00 AM

**Client Sample ID:** MW-3

**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/5/2022 1:48:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 1:48:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 1:48:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 1:48:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	5/5/2022 1:48:00 AM	SL8771
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/5/2022 1:48:00 AM	SL8771
Surr: Toluene-d8	95.6	70-130		%Rec	1	5/5/2022 1:48:00 AM	SL8771

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

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

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## Analytical Report

Lab Order: 2205005

Date Reported: 5/9/2022

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** ENSOLUM AZTEC  
**Project:** Masden Gas Com 1E

**Lab Order:** 2205005**Lab ID:** 2205005-004**Collection Date:** 4/29/2022 10:55:00 AM**Client Sample ID:** MW-1**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/5/2022 2:11:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 2:11:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 2:11:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 2:11:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	5/5/2022 2:11:00 AM	SL8771
Surr: Dibromofluoromethane	106	70-130		%Rec	1	5/5/2022 2:11:00 AM	SL8771
Surr: Toluene-d8	96.6	70-130		%Rec	1	5/5/2022 2:11:00 AM	SL8771

**Lab ID:** 2205005-005**Collection Date:** 4/29/2022 11:15:00 AM**Client Sample ID:** MW-2R**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/5/2022 2:35:00 AM	SL8771
Toluene	ND	1.0		µg/L	1	5/5/2022 2:35:00 AM	SL8771
Ethylbenzene	ND	1.0		µg/L	1	5/5/2022 2:35:00 AM	SL8771
Xylenes, Total	ND	1.5		µg/L	1	5/5/2022 2:35:00 AM	SL8771
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	5/5/2022 2:35:00 AM	SL8771
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/5/2022 2:35:00 AM	SL8771
Surr: Toluene-d8	96.6	70-130		%Rec	1	5/5/2022 2:35:00 AM	SL8771

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

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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2205005

09-May-22

**Client:** ENSOLUM AZTEC**Project:** Masden Gas Com 1E

Sample ID: <b>100ng lcs 2</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>SL87719</b>		RunNo: <b>87719</b>							
Prep Date:	Analysis Date: <b>5/4/2022</b>		SeqNo: <b>3108938</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.4	70	130			
Toluene	19	1.0	20.00	0	97.4	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Sample ID: <b>mb 2</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>PBW</b>	Batch ID: <b>SL87719</b>		RunNo: <b>87719</b>							
Prep Date:	Analysis Date: <b>5/4/2022</b>		SeqNo: <b>3108939</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID: <b>2205005-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>MW-5</b>	Batch ID: <b>SL87719</b>		RunNo: <b>87719</b>							
Prep Date:	Analysis Date: <b>5/5/2022</b>		SeqNo: <b>3108941</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	70	130			
Toluene	20	1.0	20.00	0	98.6	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		96.4	70	130			

Sample ID: <b>2205005-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>MW-5</b>	Batch ID: <b>SL87719</b>		RunNo: <b>87719</b>							
Prep Date:	Analysis Date: <b>5/5/2022</b>		SeqNo: <b>3108942</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.6	70	130	1.68	20	
Toluene	19	1.0	20.00	0	96.7	70	130	1.85	20	

**Qualifiers:**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205005

09-May-22

Client: ENSOLUM AZTEC

Project: Masden Gas Com 1E

Sample ID: 2205005-001amsd		SampType: MSD			TestCode: EPA Method 8260: Volatiles Short List					
Client ID: MW-5		Batch ID: SL87719			RunNo: 87719					
Prep Date:		Analysis Date: 5/5/2022			SeqNo: 3108942		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		104	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.2	70	130	0	0	

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

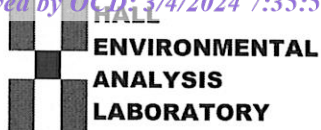
S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit



## Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2205005

RcptNo: 1

Received By: Juan Rojas

4/30/2022 8:30:00 AM

*Juan Rojas*

Completed By: Sean Livingston

5/2/2022 8:45:07 AM

*Sean Livingston*

Reviewed By:

*JN 4/5/22*  
*JN 5/4/22***Chain of Custody**

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

**Log In**

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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:

(&lt;2 or &gt;12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: *KPG 5-2-22***Special Handling (if applicable)**

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.5	Good				



## Chain-of-Custody Record

Client:

Ensolum, LLC

Mailing Address:

606 S. Rio Grande, Suite 101A

Artes, NM 87410

Phone #:

email or Fax#: K.Samners@ensolum.com

QA/QC Package:

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

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Marden Gas Com #1/E

Project #:

05A1226-126

Project Manager:

K. Samners

Sampler:

L. Daniel H

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.6-0.1-0.5 (°C)

Date Time Matrix Sample Name

4/29/22 9:15 W MW-5

4/29/22 9:55 W MW-4

4/29/22 10:15 W MW-3

4/29/22 10:55 W MW-1

4/29/22 11:15 W MW-2R

Container Type and #

3 x 4 Gallon

Preservative Type

H<sub>2</sub>O<sub>2</sub>

HEAL No.

2205005

001

002

003

004

005

## Analysis Request

BTX / MTBE / TMBs (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

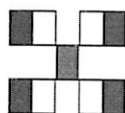
RCRA 8 Metals

Cl, F, Br, NO<sub>2</sub>, NO<sub>3</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

HALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Remarks:

Received by: *Bill Wat* Date: 4/29/22 Time: 1220Received by: *Bill Wat* Date: 4/30/22 Time: 8130

Bill to Ensolum



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

July 29, 2022

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Masden Gas Com 1E

OrderNo.: 2207B92

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/23/2022 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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109





Analytical Report

Lab Order 2207B92

Date Reported: 7/29/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: MW-4

Project: Masden Gas Com 1E

Collection Date: 7/22/2022 9:45:00 AM

Lab ID: 2207B92-002

Matrix: AQUEOUS

Received Date: 7/23/2022 8:10:00 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	7/26/2022 7:19:00 PM	SL89798
Toluene	ND	1.0		µg/L	1	7/26/2022 7:19:00 PM	SL89798
Ethylbenzene	ND	1.0		µg/L	1	7/26/2022 7:19:00 PM	SL89798
Xylenes, Total	ND	1.5		µg/L	1	7/26/2022 7:19:00 PM	SL89798
Surr: 1,2-Dichloroethane-d4	134	70-130	S	%Rec	1	7/26/2022 7:19:00 PM	SL89798
Surr: Dibromofluoromethane	127	70-130		%Rec	1	7/26/2022 7:19:00 PM	SL89798
Surr: Toluene-d8	98.5	70-130		%Rec	1	7/26/2022 7:19:00 PM	SL89798

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

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







# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2207B92

29-Jul-22

**Client:** ENSOLUM  
**Project:** Masden Gas Com 1E

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260: Volatiles Short List</b>								
Client ID: <b>PBW</b>	Batch ID: <b>SL89798</b>	RunNo: <b>89798</b>								
Prep Date:	Analysis Date: <b>7/26/2022</b>	SeqNo: <b>3198127</b>	Units: <b>µg/L</b>							
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	12		10.00		122	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: <b>100ng lcs2</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260: Volatiles Short List</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>SL89798</b>	RunNo: <b>89798</b>								
Prep Date:	Analysis Date: <b>7/26/2022</b>	SeqNo: <b>3198323</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	12		10.00		120	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		113	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

### Qualifiers:

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





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

## Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2207B92

RcptNo: 1

Received By: Juan Rojas

7/23/2022 8:10:00 AM

Completed By: Cheyenne Cason

7/25/2022 7:53:34 AM

Reviewed By:

JR 7/25/22

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: KPA 7.25.22

### 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	0.6	Good	Yes			

## Chain-of-Custody Record

Client: Ensoform, LLC

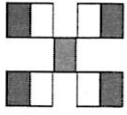
Mailing Address: 606 S. Encanto, Suite A  
Artes, NM 87410

Phone #: \_\_\_\_\_

Email or Fax#: Ksummers@ensoform.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 #: 05A12261026


**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Project Manager: K. Summers

Sampler: L. Daniels

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0-5-0.2-0.6 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
7/22/22	9:10	W	MW-5	Bx42 Bulla	Chloro	2207B92
7/22/22	9:45	W	MW-4			001
7/22/22	10:10	W	MW-3			002
7/22/22	10:45	W	MW-1			003
7/22/22	11:10	W	MW-2R			004
						005

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 <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X									
X									
X									
X									
X									

Received by: [Signature] Date: 7/22/22 Time: 1232

Relinquished by: [Signature]

Received by: [Signature] Date: 7/23/22 Time: 840

Relinquished by: [Signature]

Remarks:

Bill to Ensoform



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

November 04, 2022

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

RE: Masden Gas Com 1E

OrderNo.: 2210A48

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/20/2022 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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2210A48

Date Reported: 11/4/2022

CLIENT: ENSOLUM AZTEC

Client Sample ID: MW-4

Project: Masden Gas Com 1E

Collection Date: 10/19/2022 12:05:00 PM

Lab ID: 2210A48-002

Matrix: AQUEOUS

Received Date: 10/20/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST							Analyst: JR
Benzene	ND	1.0		µg/L	1	10/31/2022 11:26:43 AM	R92220
Toluene	ND	1.0		µg/L	1	10/31/2022 11:26:43 AM	R92220
Ethylbenzene	ND	1.0		µg/L	1	10/31/2022 11:26:43 AM	R92220
Xylenes, Total	ND	1.5		µg/L	1	10/31/2022 11:26:43 AM	R92220
Surr: Dibromofluoromethane	124	70-130		%Rec	1	10/31/2022 11:26:43 AM	R92220
Surr: Toluene-d8	95.6	70-130		%Rec	1	10/31/2022 11:26:43 AM	R92220

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

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











# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2210A48

04-Nov-22

Client: ENSOLUM AZTEC

Project: Masden Gas Com 1E

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R92187</b>		RunNo: <b>92187</b>							
Prep Date:	Analysis Date: <b>10/28/2022</b>		SeqNo: <b>3312719</b>		Units: <b>µg/L</b>					
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: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	12		10.00		115	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Sample ID: <b>100ng lcs4</b>	SampType: <b>LCS4</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>R92187</b>		RunNo: <b>92187</b>							
Prep Date:	Analysis Date: <b>10/28/2022</b>		SeqNo: <b>3312723</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	80	120			
Toluene	21	1.0	20.00	0	104	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	63	1.5	60.00	0	106	80	120			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: <b>100ng lcs4</b>	SampType: <b>LCS4</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>R92220</b>		RunNo: <b>92220</b>							
Prep Date:	Analysis Date: <b>10/31/2022</b>		SeqNo: <b>3312740</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	118	80	120			
Toluene	22	1.0	20.00	0	110	80	120			
Ethylbenzene	22	1.0	20.00	0	110	80	120			
Xylenes, Total	68	1.5	60.00	0	114	80	120			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	12		10.00		122	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID: <b>2210a48-002ams</b>	SampType: <b>MS4</b>		TestCode: <b>EPA Method 8260: Volatiles Short List</b>							
Client ID: <b>MW-4</b>	Batch ID: <b>R92220</b>		RunNo: <b>92220</b>							
Prep Date:	Analysis Date: <b>10/31/2022</b>		SeqNo: <b>3312748</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	26	1.0	20.00	0	129	80	120			S

### Qualifiers:

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

## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2210A48

04-Nov-22

Client: ENSOLUM AZTEC

Project: Masden Gas Com 1E

Sample ID: 2210a48-002ams	SampType: MS4	TestCode: EPA Method 8260: Volatiles Short List									
Client ID: MW-4	Batch ID: R92220	RunNo: 92220									
Prep Date:	Analysis Date: 10/31/2022	SeqNo: 3312748 Units: µg/L									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Toluene	23	1.0	20.00	0	114	80	120				
Ethylbenzene	22	1.0	20.00	0	112	80	120				
Xylenes, Total	69	1.5	60.00	0	114	80	120				
Surr: 4-Bromofluorobenzene	9.6		10.00		96.1	70	130				
Surr: Dibromofluoromethane	13		10.00		130	70	130				
Surr: Toluene-d8	9.5		10.00		95.0	70	130				

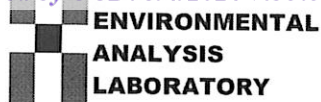
Sample ID: 2210a48-002amsd	SampType: MSD4	TestCode: EPA Method 8260: Volatiles Short List									
Client ID: MW-4	Batch ID: R92220	RunNo: 92220									
Prep Date:	Analysis Date: 10/31/2022	SeqNo: 3312750 Units: µg/L									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	25	1.0	20.00	0	124	80	120	4.23	20	S	
Toluene	22	1.0	20.00	0	108	80	120	5.65	20		
Ethylbenzene	21	1.0	20.00	0	106	80	120	4.91	20		
Xylenes, Total	66	1.5	60.00	0	110	80	120	4.18	20		
Surr: 4-Bromofluorobenzene	9.7		10.00		96.7	70	130	0	0		
Surr: Dibromofluoromethane	13		10.00		130	70	130	0	0		
Surr: Toluene-d8	9.6		10.00		95.5	70	130	0	0		

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260: Volatiles Short List									
Client ID: PBW	Batch ID: R92220	RunNo: 92220									
Prep Date:	Analysis Date: 10/31/2022	SeqNo: 3312796 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: 4-Bromofluorobenzene	10		10.00		101	70	130				
Surr: Dibromofluoromethane	12		10.00		120	70	130				
Surr: Toluene-d8	9.7		10.00		97.4	70	130				

## Qualifiers:

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



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: 2210A48

RcptNo: 1

Received By: Juan Rojas 10/20/2022 7:15:00 AM

Completed By: Tracy Casarrubias 10/20/2022 10:22:35 AM

Reviewed By: KRC 10.20.22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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:

(&lt;2 or &gt;12 unless noted)

Adjusted?

Checked by: gm 10/20/22

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

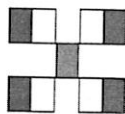
17. Cooler Information

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



## Chain-of-Custody Record

Client: <u>Ensolium LLC</u>		Turn-Around Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush				
Mailing Address: <u>666 S. Rio Grande, Suite 100</u>		Project Name: <u>Masden Gas Com/E</u>				
Phone #: _____		Project #: <u>05A1226026</u>				
email or Fax#: <u>K. Summers@ensolium.com</u>		Project Manager: <u>K. Summers</u>				
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Sampler: <u>L. Danielle</u>				
Accreditation: <input type="checkbox"/> Az Compliance		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
<input type="checkbox"/> NELAC <input type="checkbox"/> Other		# of Coolers: <u>1</u>				
<input type="checkbox"/> EDD (Type) _____		Cooler Temp (including CF): <u>7.0-0-20 (°C)</u>				
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
10/19/22	11:25	W	MW-5	BK400001	Hall	2210A48
10/19/22	12:05	W	MW-4			001
10/19/22	12:30	W	MW-3			002
10/19/22	13:10	W	MW-1			003
10/19/22	13:50	W	MW-2R			004
						005
Relinquished by: <u>[Signature]</u>		Received by: <u>W. Ware</u>		Date: <u>10/19/22</u>	Time: <u>1422</u>	
Date: <u>10/19/22</u>	Time: <u>1422</u>	Relinquished by: <u>[Signature]</u>		Date: <u>10/19/22</u>	Time: <u>1802</u>	
Date: <u>10/19/22</u>	Time: <u>1802</u>	Relinquished by: <u>[Signature]</u>		Date: <u>10/19/22</u>	Time: <u>7:15</u>	



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

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<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub> ☐  
 8260 (VOA) ☐  
 8270 (Semi-VOA) ☐  
 Total Coliform (Present/Absent) ☐

Remarks:

B11 to Ensolium

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

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

CONDITIONS  
  
Action 319617

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID:
	241602
	Action Number:
	319617
Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)	

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the Masden Gas Com #1E 2022 Groundwater Monitoring Report: Content Satisfactory 1. Continue to conduct groundwater sampling on a quarterly basis for constituents of concern BTEX. 2. Once eight (8) consecutive quarterly sampling analyses demonstrate COCs below the allowable concentrations in the WQCC, a one-time vadose zone sampling plan must be submitted to OCD as per 19.15.30.9 paragraph D. 3. Resume groundwater pumping and disposal events as necessary. 4. Submit the 2024 Annual Report to OCD by April 1, 2025.	6/13/2024