ENSOLUM

ABATEMENT COMPLETION REPORT

Property:
2D-1 Well Tie/Bruce R Sullivan #2 (7/29/21)
Unit Letter I, Sec 23 T28N R10W
San Juan County, New Mexico

NM EMNRD OCD Incident ID No. NAPP2121054964

December 15, 2022
(updated April 13, 2023)

Ensolum Project No. 05A1226149

Prepared for:

Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, NM 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 Abatement Completion Report for the Enterprise Field Services, LLC (Enterprise) 2D-1 Well Tie/Bruce R Sullivan #2 (7/29/21) site, referred to hereinafter as the "Site".

This Abatement Completion Report documents compliance with the abatement standards and requirements of Subsections A, B, and D of 19.15.30.9 New Mexico Administrative Code (NMAC).

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC
Site Name:	2D-1 Well Tie/Bruce R Sullivan #2 (7/29/21)
NM EMNRD OCD Incident ID No.	NAPP2121054964
Location:	36.644538° North, 107.857891° West Unit Letter I, Section 23, Township 28 North, Range 10 West San Juan County, New Mexico
Property:	Private
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On July 29, 2021, a release of natural gas was identified on the 2D-1 Well Tie/Bruce R Sullivan #2 pipeline. On August 9, 2021, Enterprise initiated activities to facilitate the repair of the pipeline and remediate petroleum hydrocarbon impact. During remediation activities, water was encountered at approximately seven feet bgs. Five soil samples and one water sample were collected from the excavation. Soil laboratory analytical results indicated no COC concentrations above the applicable NM EMNRD OCD closure criteria. The initial water analytical results indicated a benzene concentration slightly above the applicable NM Water Quality Control Commission (WQCC) standards. To further evaluate COC concentrations in groundwater, Enterprise installed a temporary monitoring well at the Site during excavation backfill activities. A sample was collected from the temporary well and submitted for laboratory analysis. Based on the laboratory analytical results for the water sample, benzene, sulfate, and TDS concentrations were identified above the applicable WQCC standards. In response to the groundwater COC exceedances Enterprise proposed to install additional temporary monitoring wells at the Site. Additional details regarding the excavation and water sampling activities are provide in the *Interim Characterization Report and Remediation Plan* (Ensolum), February 9, 2022).

During March 2022, Ensolum implemented environmental site investigation activities to evaluate the extent of potentially impacted groundwater, which resulted in the advancement of five soil borings at locations partially limited by topography and vegetation. These soil borings were then completed as groundwater monitoring wells (MW-1R and MW-2 through MW-5). As the existing temporary monitoring point MW-1 was essentially a drive-point well, it was replaced by MW-1R (with a sand-gravel pack and annular plug) to allow for proper well development. COCs were not identified in soils at concentrations above the NM EMNRD OCD closure criteria or in groundwater at concentrations above the NM WQCC standards (*Environmental Site Investigation Report and Remediation Plan* (Ensolum, May 25, 2022).

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

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the NM EMNRD OCD. To address activities related to oil and gas releases, the NM EMNRD OCD references NMAC 19.15.29 *Releases,* which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. Additionally, Ensolum utilized the NM WQCC GQSs (NMAC 20.6.2 *Ground and Surface Water Protection*) to evaluate groundwater conditions.

Abatement standards for groundwater at the Site include the following 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

Ensolum conducted groundwater sampling events during March, April, May, June, and August 2022. The groundwater sampling program consisted of the collection of one groundwater sample from each of the monitoring wells. Ensolum also conducted one sampling event in April 2023. Regulatory correspondence is provided in **Appendix B**. The groundwater sampling program consisted of the following:

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

- Each two-inch diameter monitoring well was 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 during each event.

- 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 taken every three to five minutes while purging. Purging is considered complete once key parameters (especially pH and conductivity) have stabilized for three consecutive readings.

- Groundwater samples were collected in laboratory supplied containers (pre-preserved by the laboratory with mercuric chloride ($HgCl_2$)). The containers were labeled and sealed using the laboratory supplied labels and custody seals and were 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 VOCs utilizing US EPA SW-846 Method #8260, and chloride and sulfate utilizing EPA Method #300.0. Because chloride was not previously detected above closure standards, the groundwater samples collected during the April 2022 sampling event were not analyzed for chloride. Sulfate was only analyzed for during April 2023 to verify background concentrations. Total dissolved solids (TDS) were also analyzed during the April 2023 event utilizing method SM2540C. Additionally, the groundwater samples collected during June 2022 were only analyzed for VOCs BTEX utilizing US EPA SW-846 Method #8260.

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

Analyte	Sample Type	No. of Samples	Method
VOCs	Groundwater	25	SW-846 8260
Chloride	Groundwater	20	EPA 300.0
Sulfate	Groundwater	3	EPA 300.0
TDS	Groundwater	3	SM2540C

The groundwater laboratory analytical results are summarized in **Table 1** and **Table 2** (**Appendix C**). The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix D**.

3.2 Groundwater Flow Direction

Each monitoring well was previously surveyed to determine top-of-casing (TOC) elevations. The groundwater flow direction at the Site is generally toward the north-northeast, with an apparent average gradient of approximately 0.007 feet per foot (ft/ft) to 0.008 ft/ft across the Site.

Groundwater measurements collected during the March, April, May, June, and August 2022 gauging events are presented in **Table 3** (**Appendix C**). A groundwater gradient map prepared from the March, April, May, June, and August 2022 gauging event data is included as **Figure 4A** through **Figure 4E**, respectively (**Appendix A**).

3.3 Groundwater Data Evaluation

Ensolum compared the laboratory analytical results or laboratory PQLs /RLs associated with the groundwater samples collected from monitoring wells during the March, April, May, June, and August 2022, and April 2023 sampling events to the NM WQCC Human Health Standards (HHSs) and Domestic Water Supply Standards (DWSSs). The results of the groundwater sample analyses are summarized in **Table 1** and **Table 2** of **Appendix C**. The Site Map with groundwater analytical results are provided as **Figure 5A** through **Figure 5E**, respectively, of **Appendix A**.

VOCs

The following discussion only includes the VOC constituents with an established WQCC standard. The remaining VOC constituents that indicated a reported concentration above the laboratory PQLs/ RLs are summarized in **Table 1** (**Appendix C**).

- The March, April, May, June, and August 2022 analytical results for all monitoring well samples do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- The March, April, May, June, and August 2022 analytical results for all monitoring well samples do not indicate toluene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 1,000 µg/L.

- The March, April, May, June, and August 2022 analytical results for all monitoring well samples identify no ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 700 µg/L.

- The March, April, May, June, and August 2022 analytical results for all monitoring well samples identify no total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 620 µg/L.

- The March, April, May, and August 2022 analytical results for all monitoring well samples indicate no naphthalene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 30 µg/L.

Chloride/Sulfate/TDS

- The March, May, June, and August 2022 analytical results for all monitoring well samples indicate chloride concentrations ranging from 8.8 mg/L (MW-5 (March 2022)) to 49 mg/L (MW-1R (March 2022)), which are below the WQCC DWSS of 250 mg/L.

- The laboratory analytical result for the samples from MW-1R, ME-4, and MW-5 indicate sulfate concentrations of 1,900 mg/L, 680 mg/L, and 4,400 mg/L, respectively, which exceed the WQCC DWSS of 600 mg/L.

- The laboratory analytical results for the samples from MW-1R, MW-4, and MW-5 indicate TDS concentrations of 3,120 mg/L, 1,210 mg/L, and 6,650 mg/L, respectively, which exceed the WQCC DWSS of 1,000 mg/L.

4.0 FINDINGS

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

- The groundwater samples collected from the monitoring wells during the March, April, May, June, and August 2022 sampling events do not indicate VOC concentrations above the applicable WQCC GQSs.

- The samples analyzed for sulfate and TDS during April 2023 identified the higher concentrations at the upgradient (background) well (MW-5), suggesting naturally occuring sulfate and TDS.

- Based on gauging data, the groundwater flow direction at the Site is generally toward the northeast, with an apparent average gradient of approximately 0.007 ft/ft to 0.008 ft/ft across the Site.

5.0 RECOMMENDATIONS

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

- Submit 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 of abatement of water contaminants completion based on an alternative sampling schedule of:
    - Five 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 NMAC request that no abatement plan 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 temporary 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.

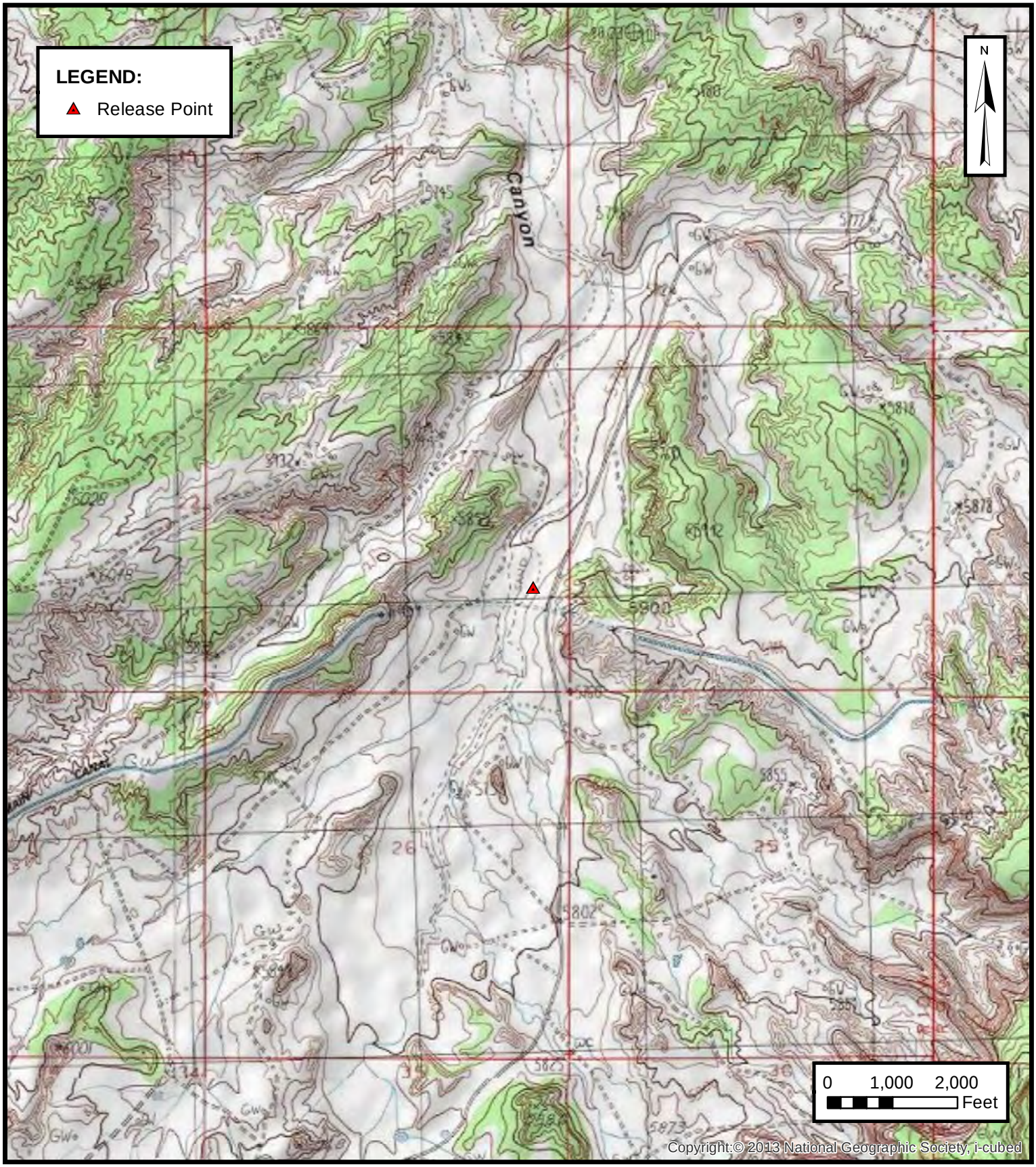
6.3 Reliance

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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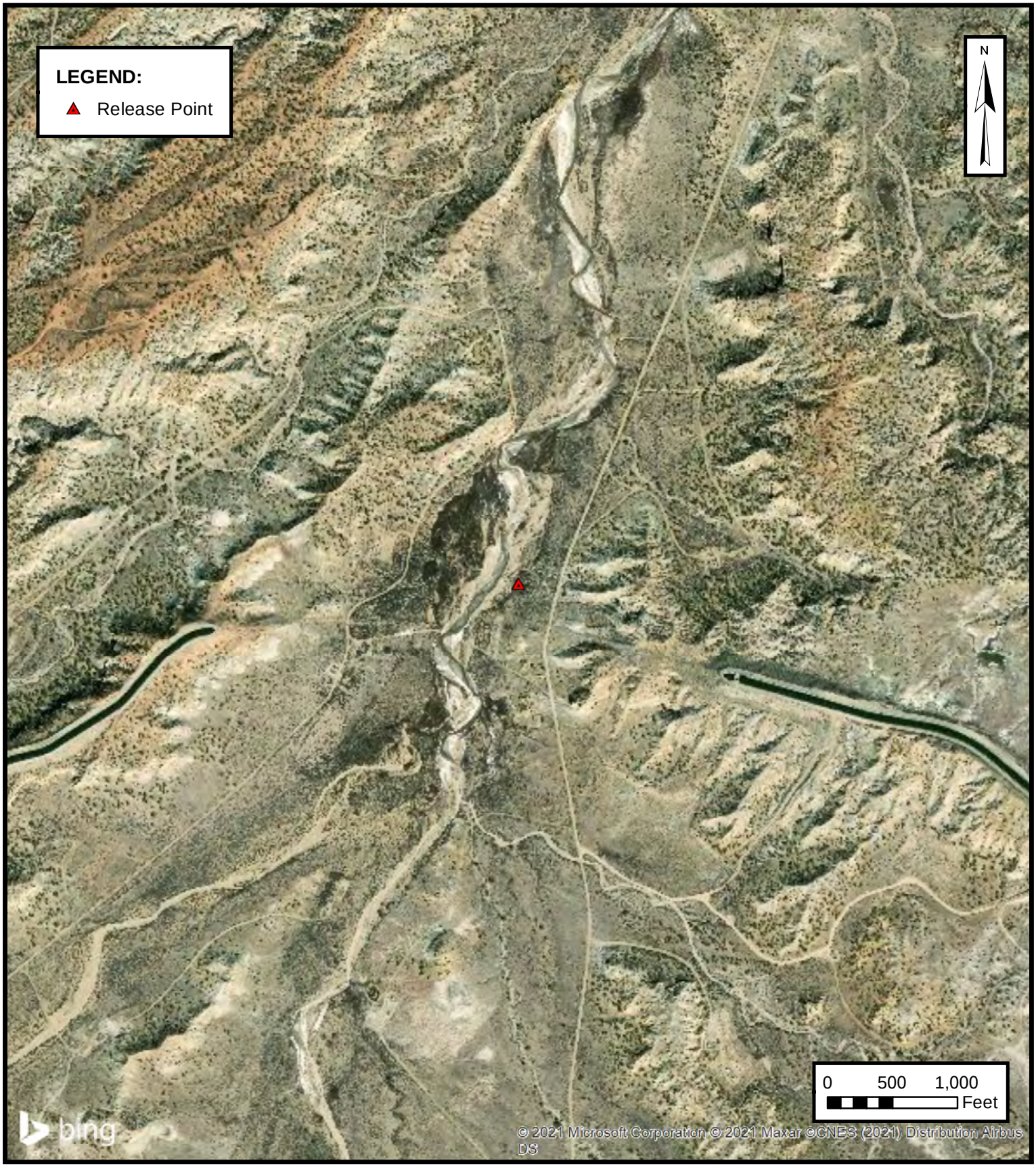
Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
1



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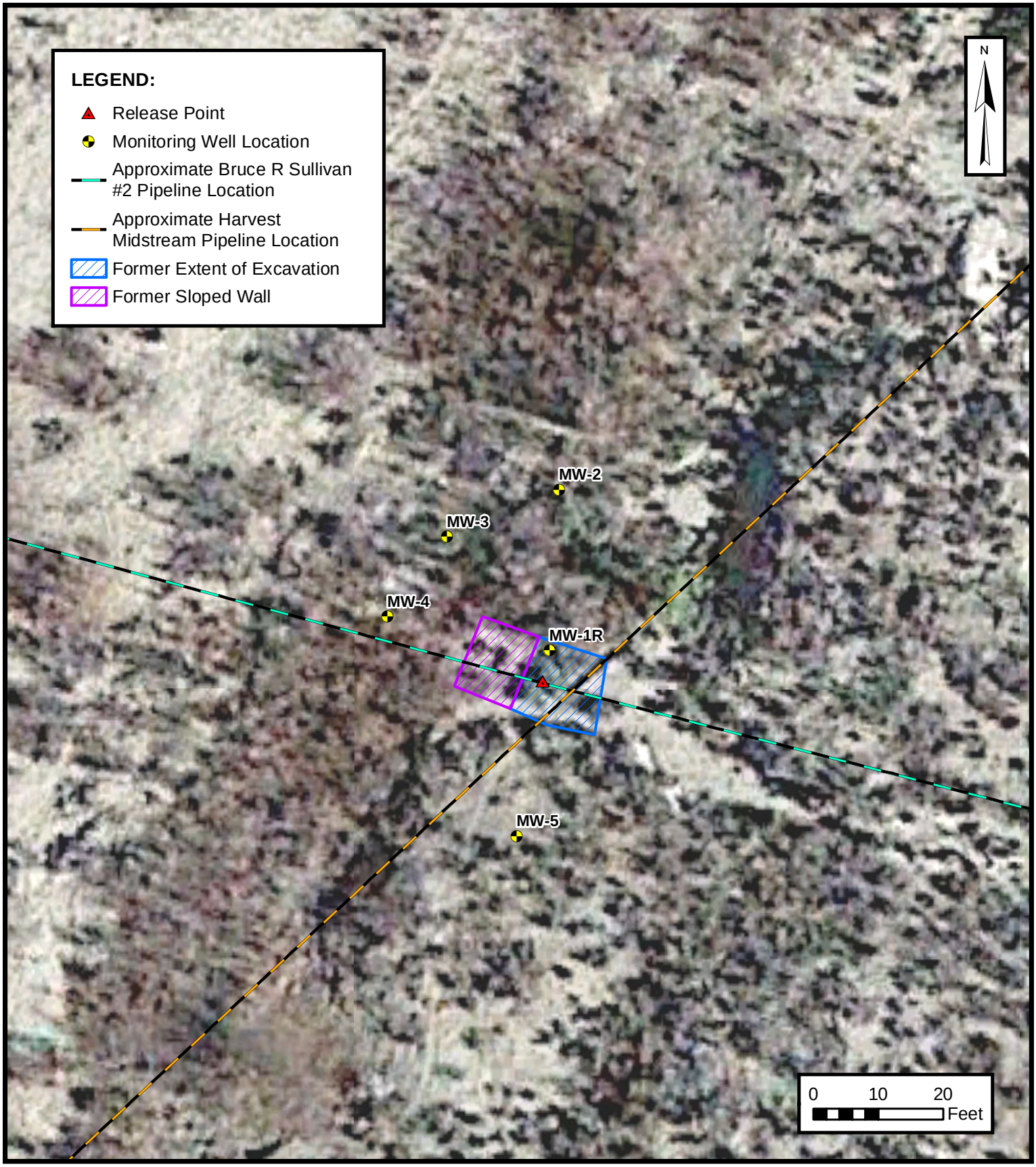
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
2



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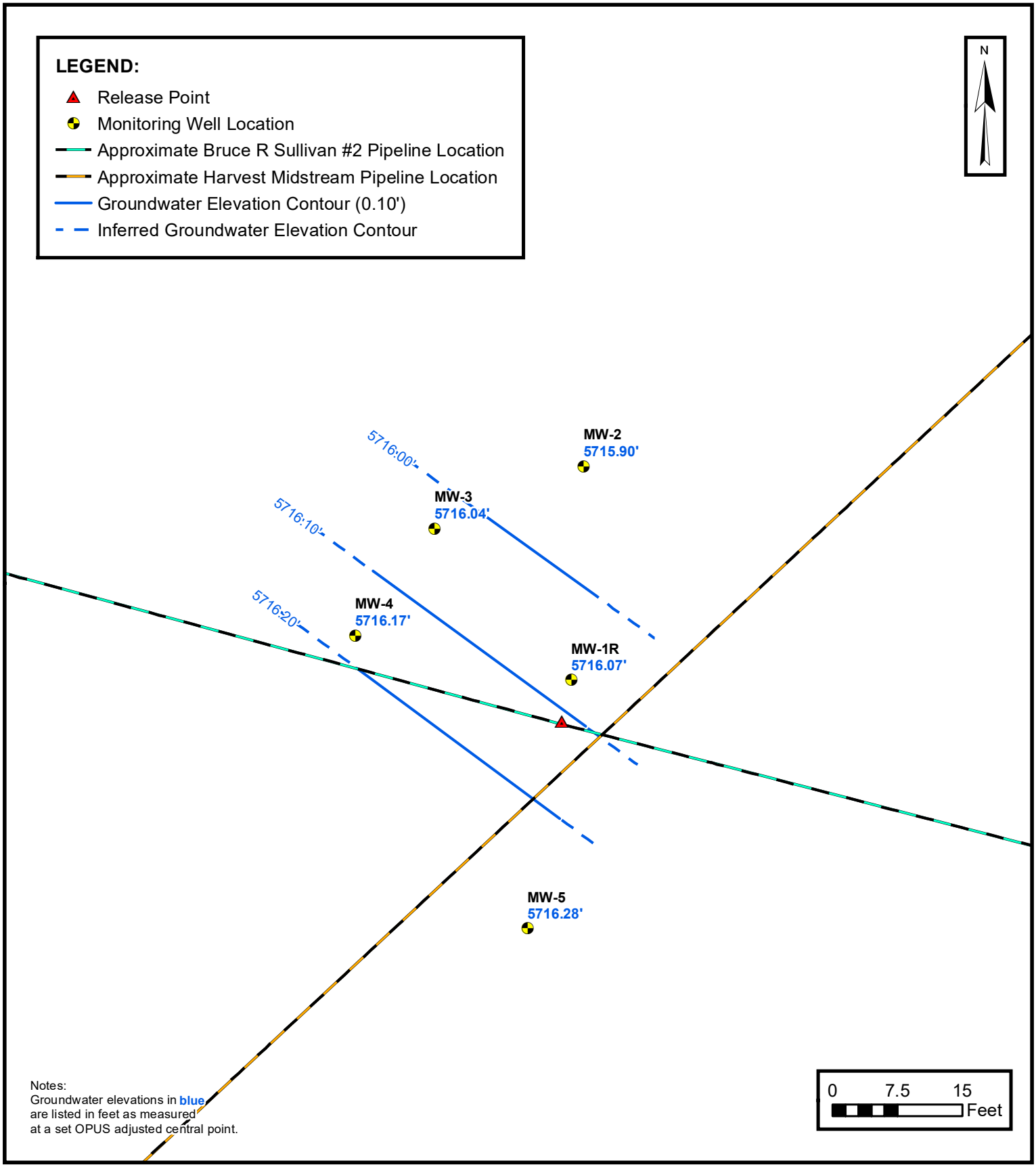
SITE MAP

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
3



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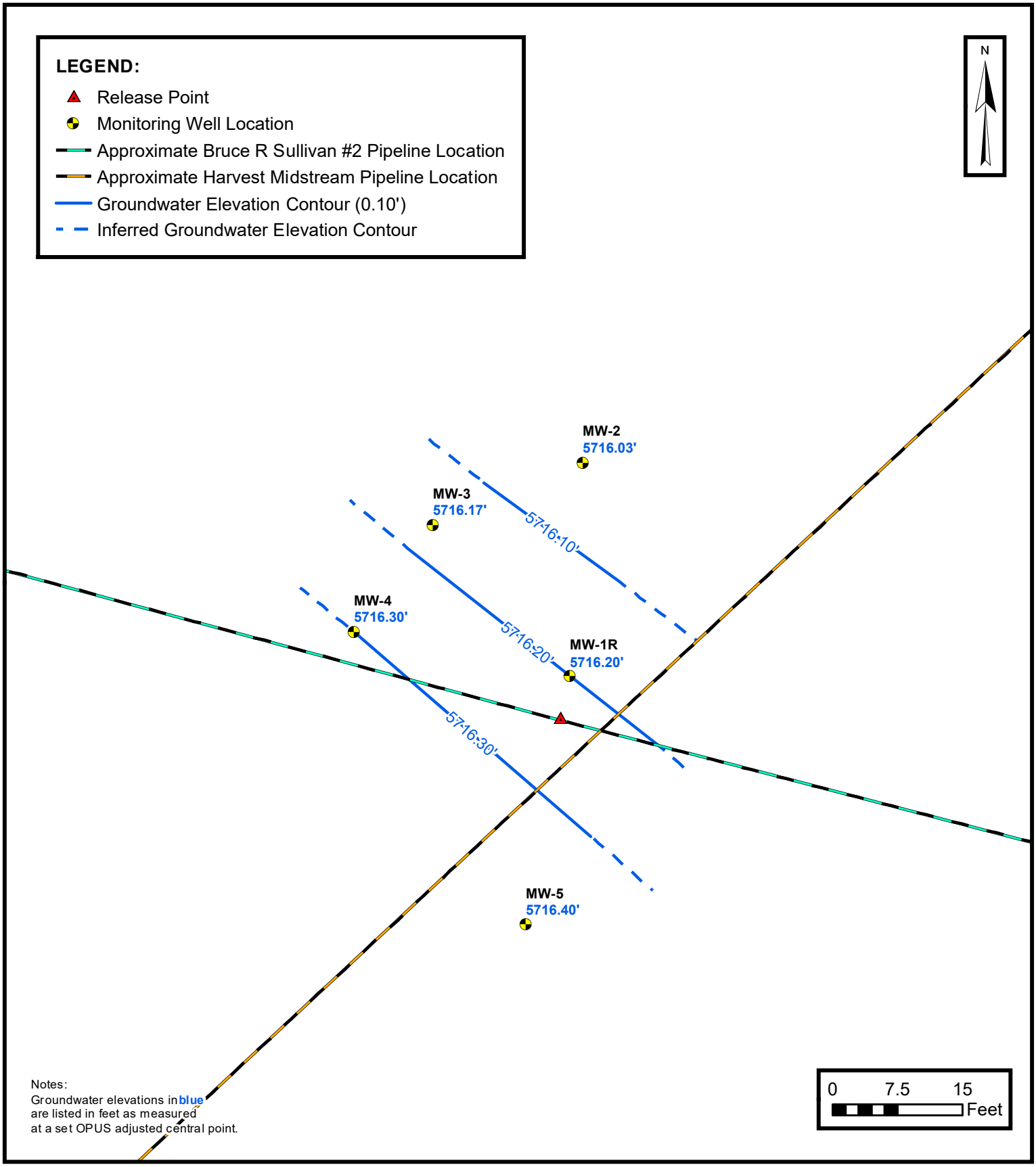
GROUNDWATER GRADIENT MAP (MARCH 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
4A



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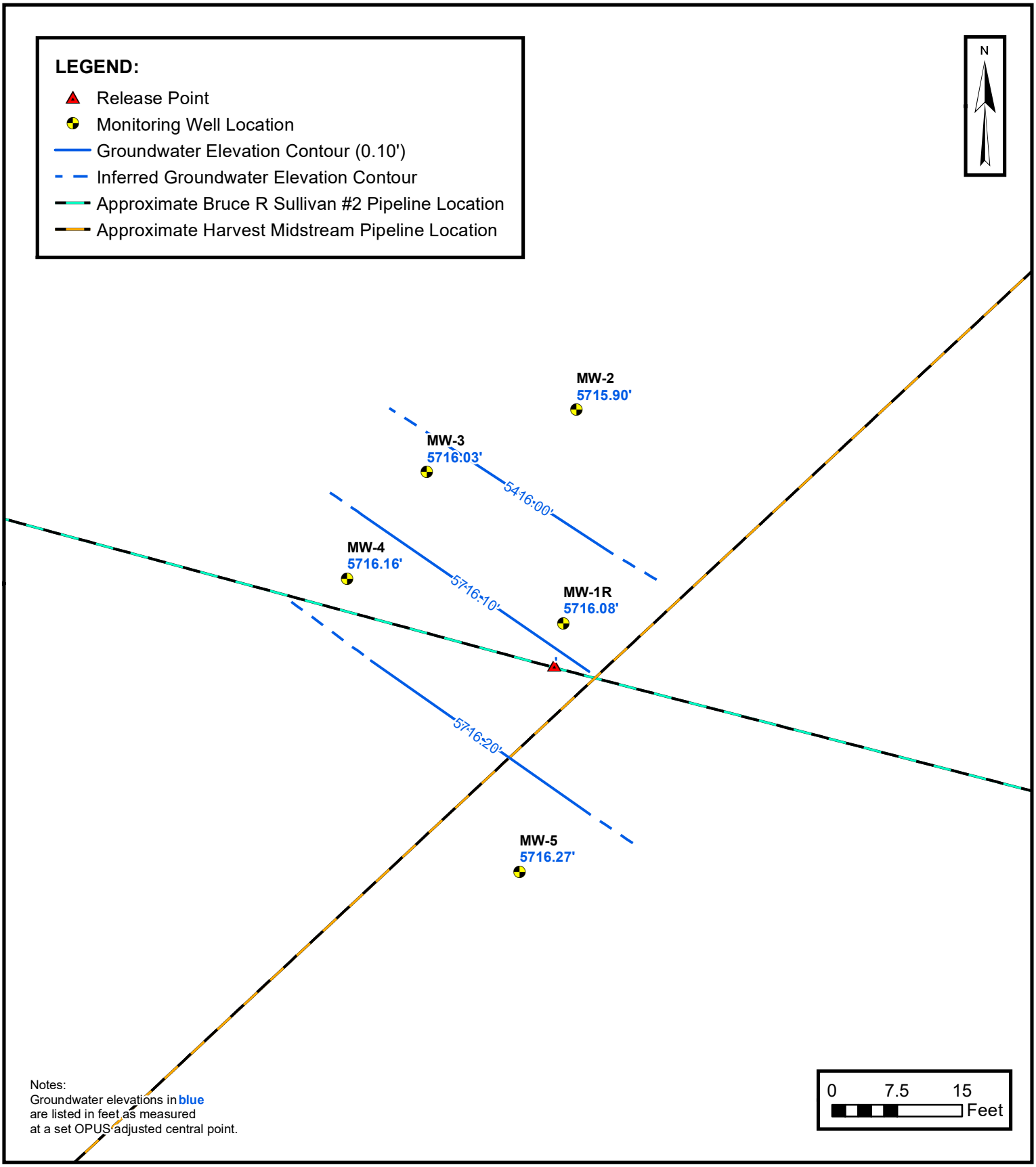
GROUNDWATER GRADIENT MAP (APRIL 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
4B



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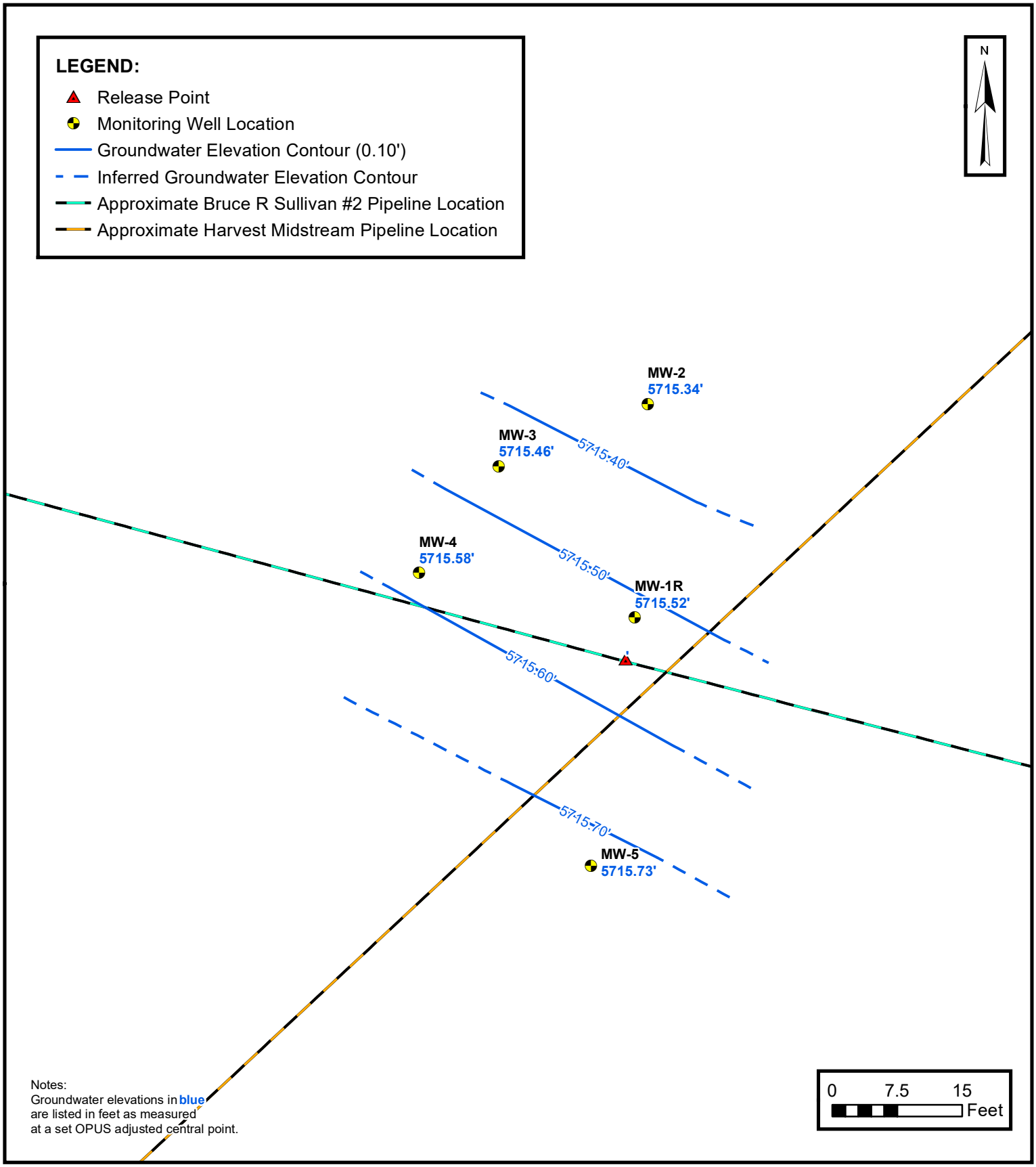
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER GRADIENT MAP (MAY 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
4C



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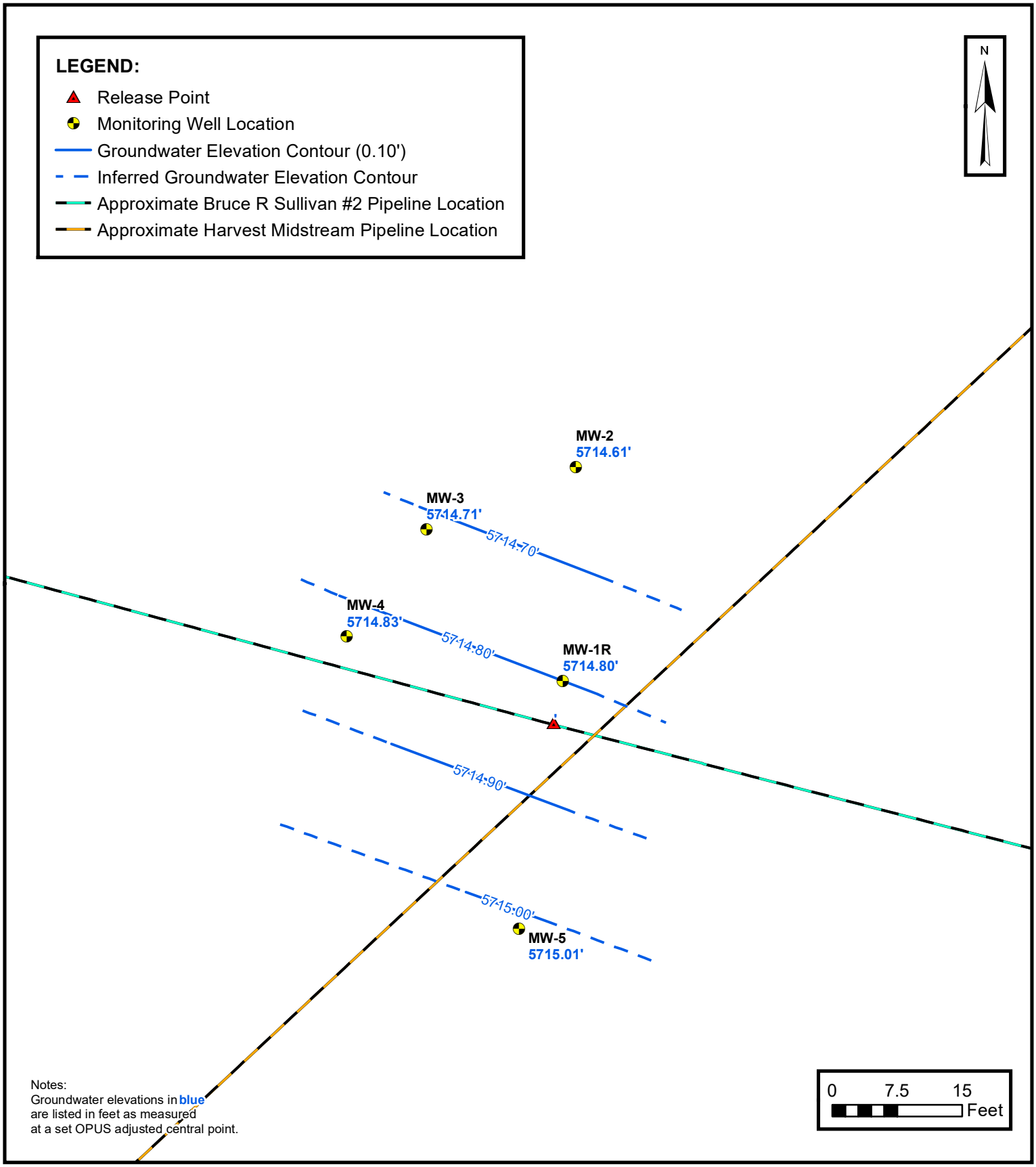
GROUNDWATER GRADIENT MAP (JUNE 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
4D



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GROUNDWATER GRADIENT MAP (AUGUST 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

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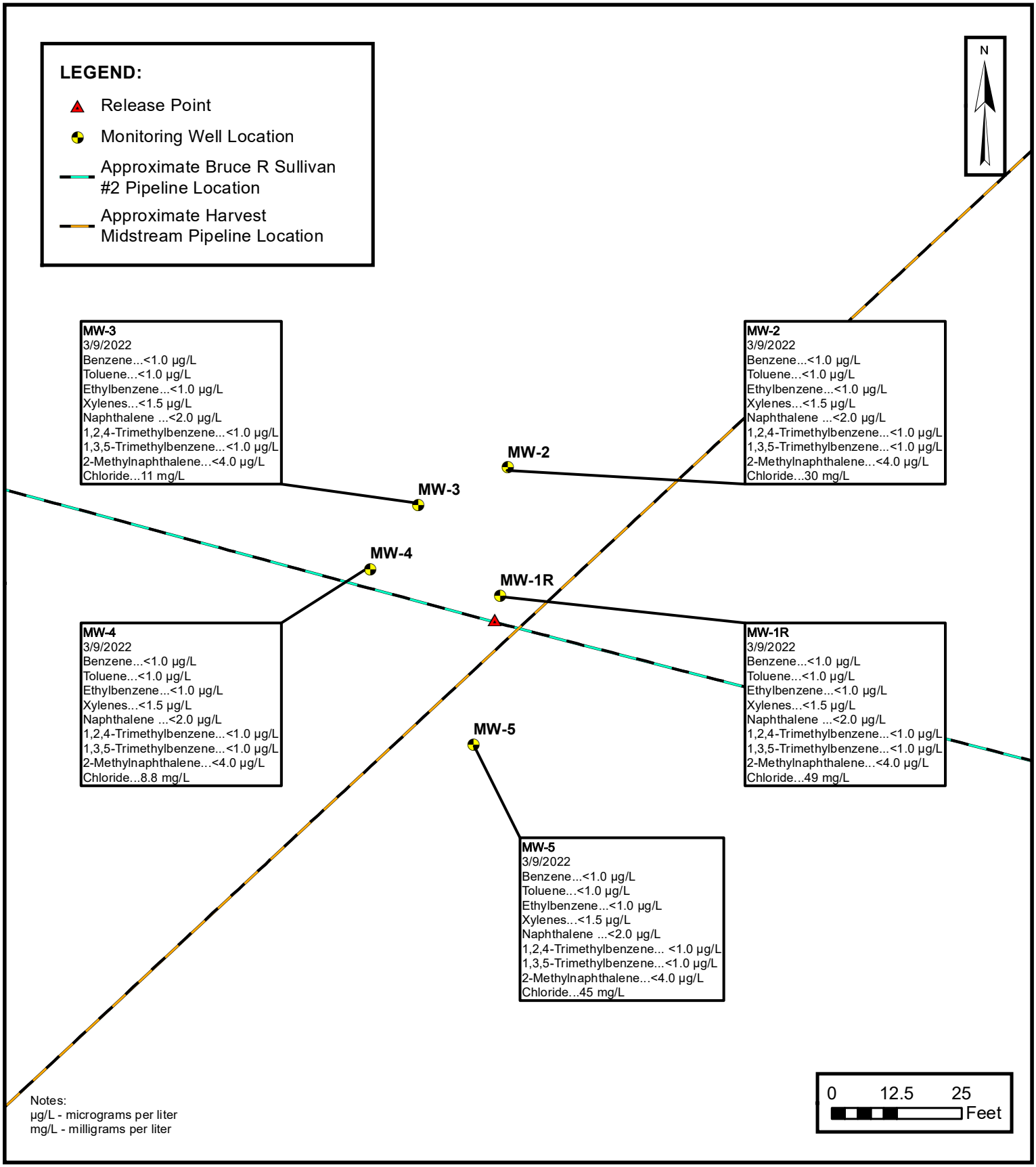
FIGURE
4E



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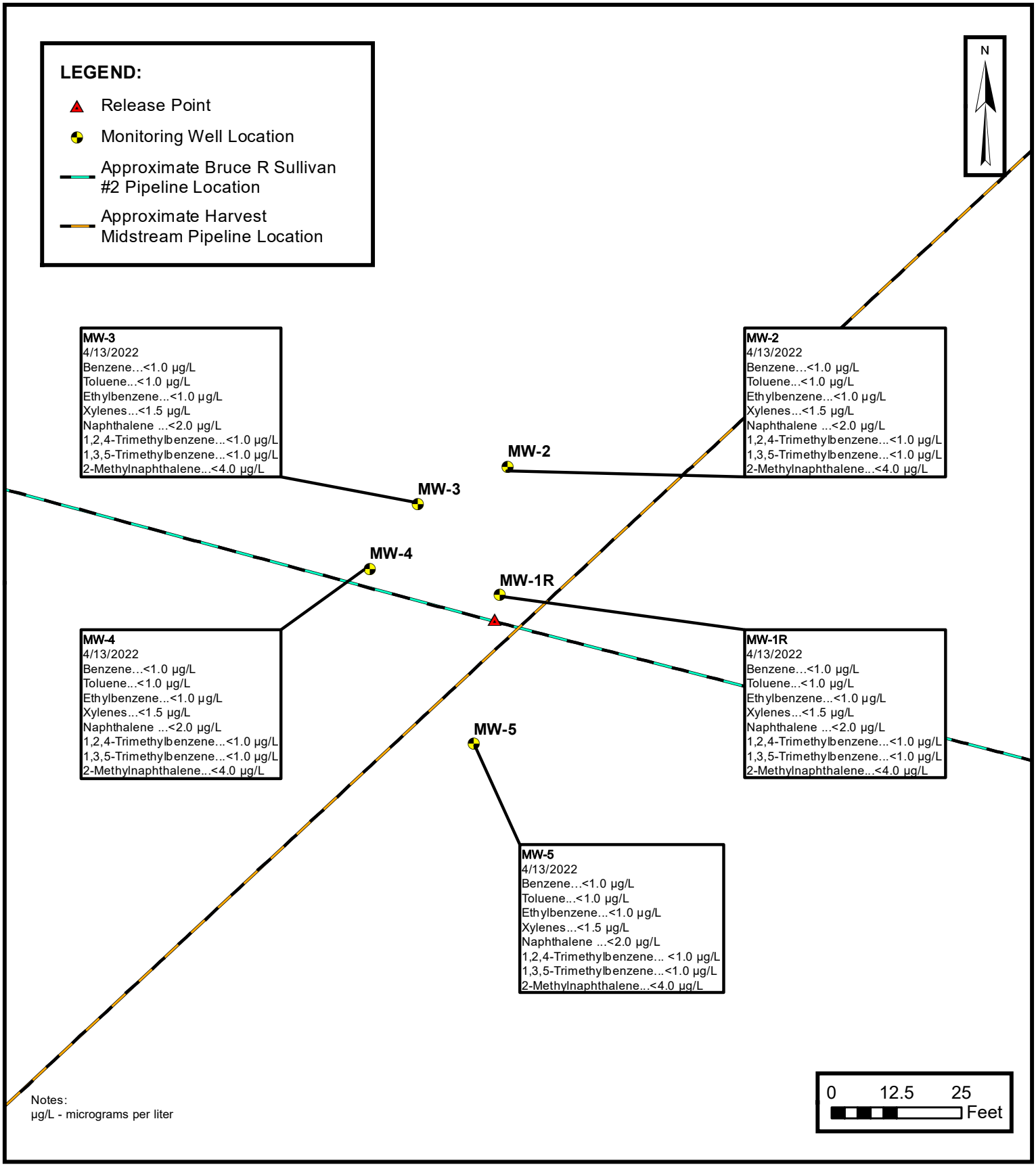
GROUNDWATER ANALYTICAL DATA MAP (MARCH 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
5A



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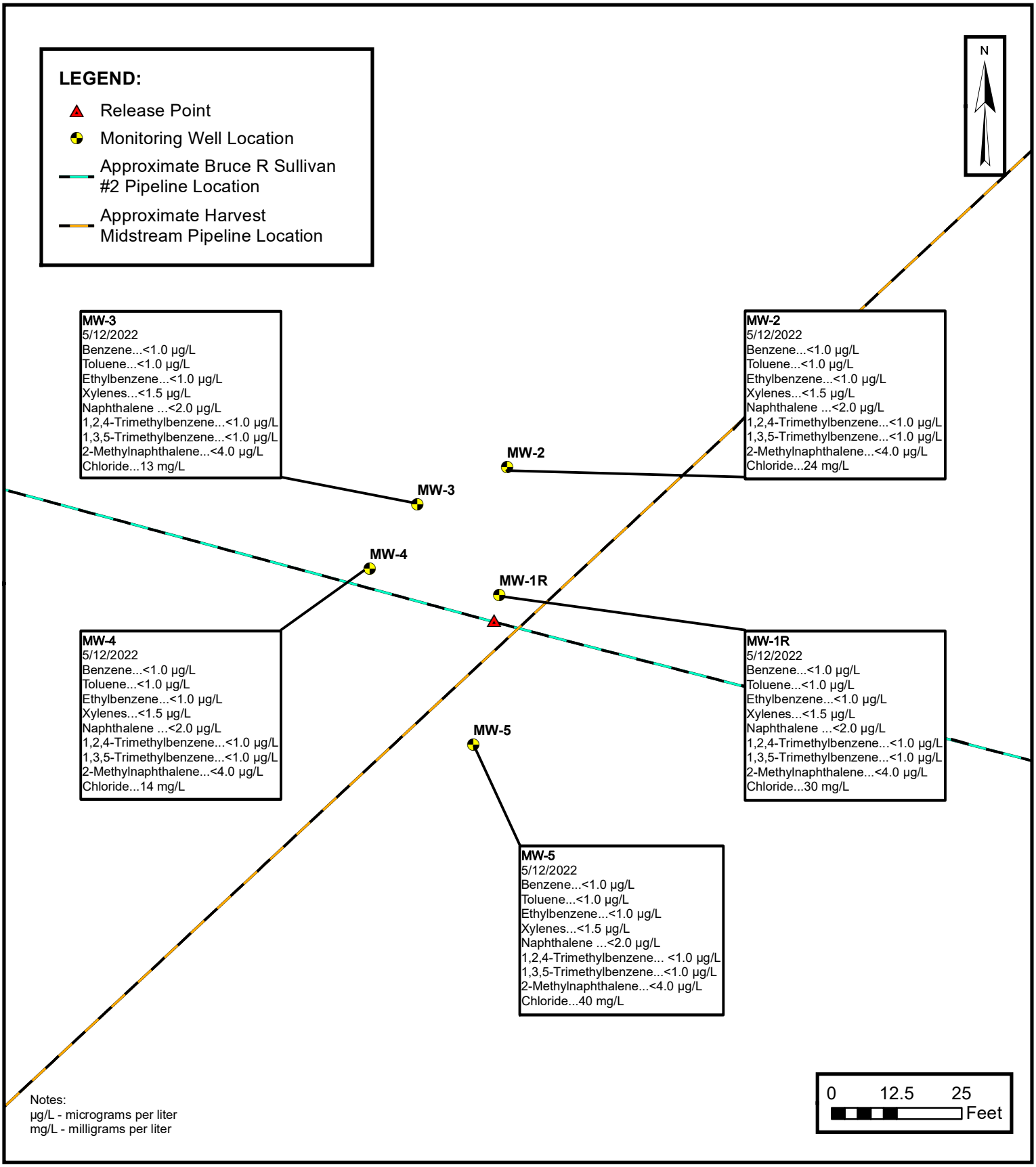
GROUNDWATER ANALYTICAL DATA MAP (APRIL 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
5B



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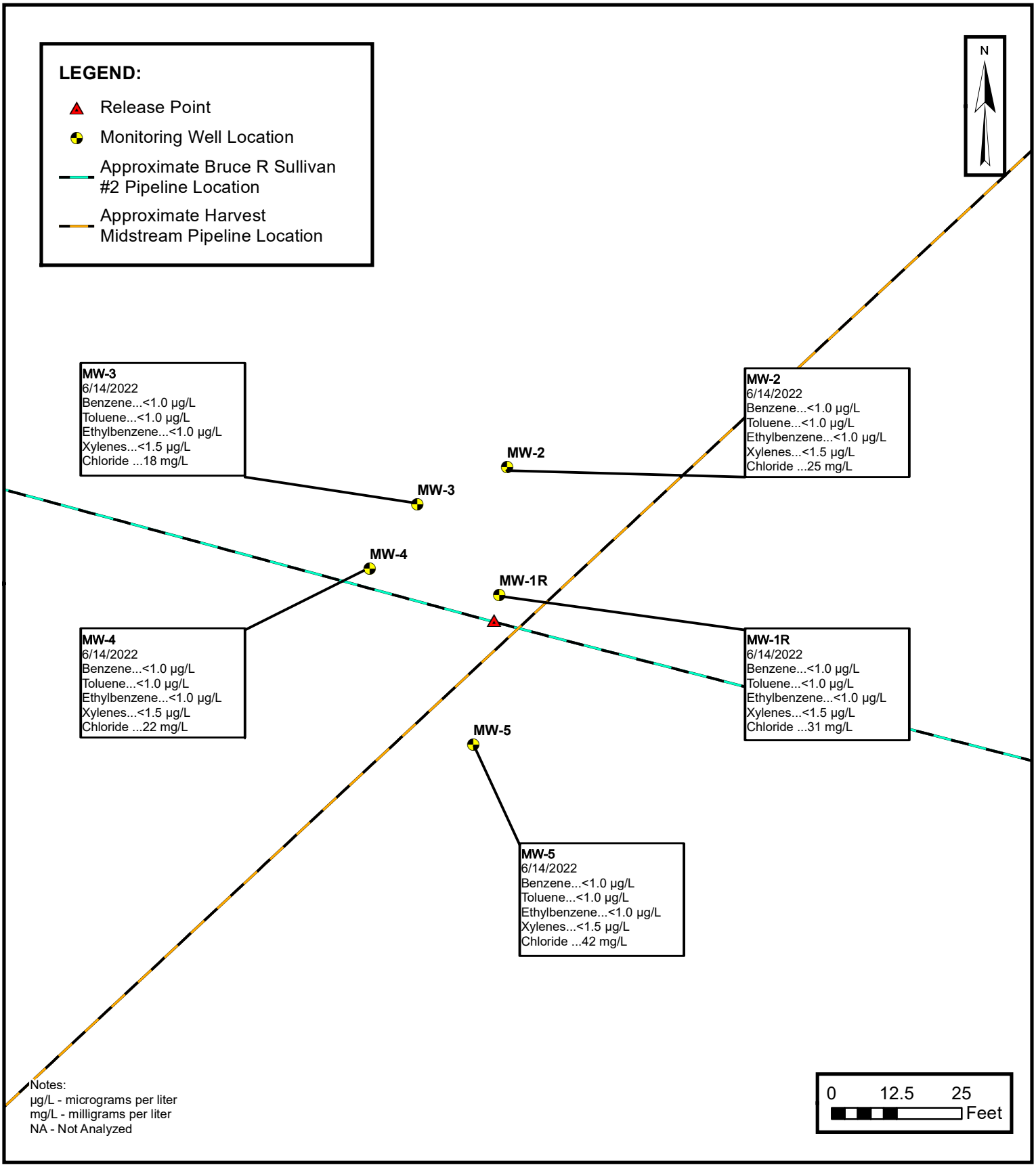
GROUNDWATER ANALYTICAL DATA MAP (MAY 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
5C



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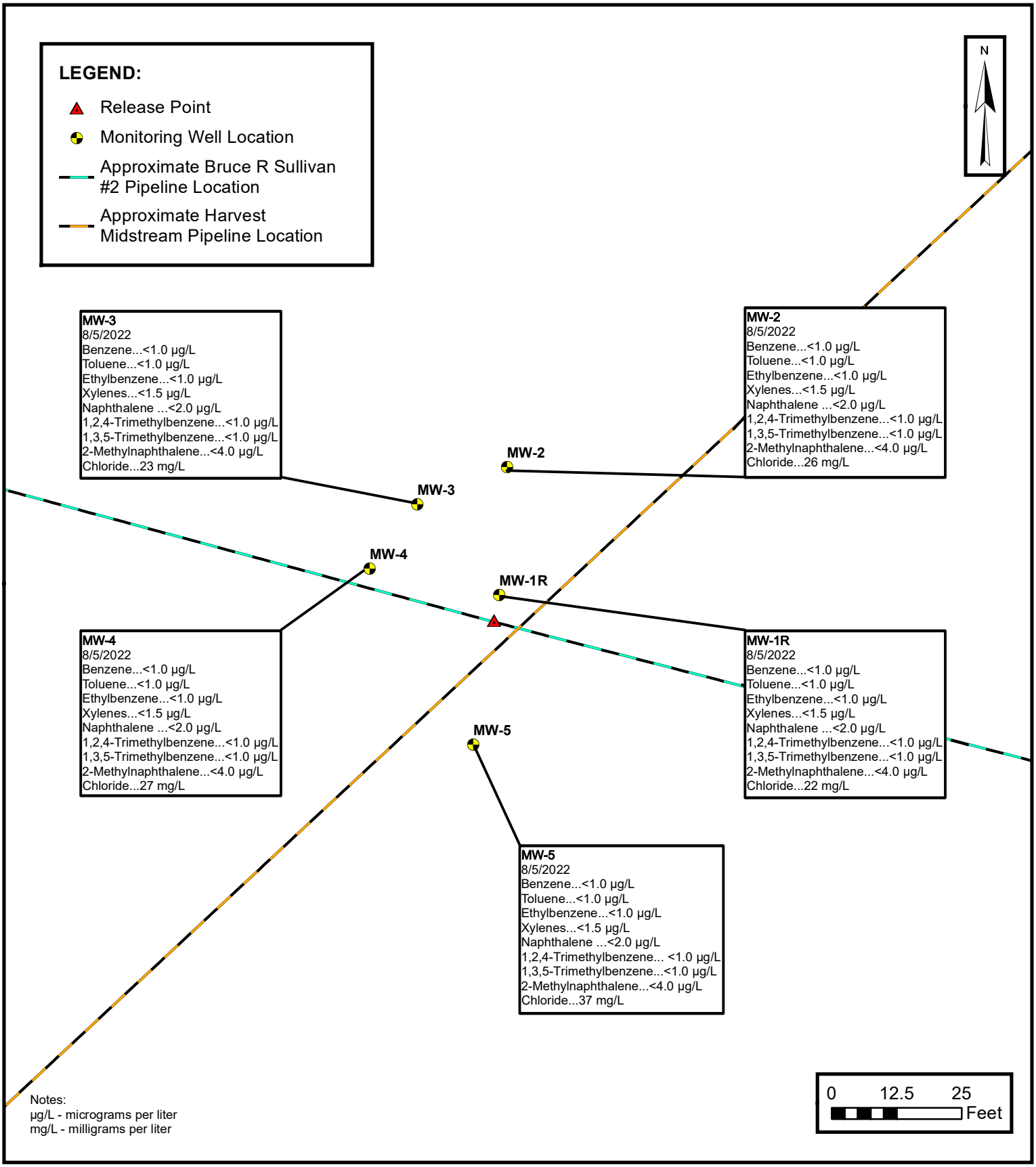
GROUNDWATER ANALYTICAL DATA MAP (JUNE 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
5D



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Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER ANALYTICAL DATA MAP (AUGUST 2022)

ENTERPRISE FIELD SERVICES, LLC
2D-1 WELL TIE/BRUCE R SULLIVAN #2 (7/29/21)
Unit Letter I, S23 T28N R10W, San Juan County, New Mexico
36.644538° N, 107.857891° W

PROJECT NUMBER: 05A1226149

FIGURE
5E

ENSOLUM

APPENDIX B

Regulatory Correspondence

From: Kyle Summers
To: Landon Daniell; Ranee Deechilly
Subject: Fwd: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964
Date: Tuesday, May 10, 2022 10:46:24 AM

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Tuesday, May 10, 2022 11:45:08 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>; Landon Daniell <ldaniell@ensolum.com>
Subject: RE: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

[**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.

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, May 10, 2022 7:20 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>; Landon Daniell <ldaniell@ensolum.com>
Subject: RE: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Nelson,

This email is a notification Enterprise will be conducting groundwater sampling/monitoring activities on May 12, 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

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Tuesday, April 12, 2022 9:45 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: RE: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

[Use caution with links/attachments]

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, time extension requests, sample event notifications, and variance requests.

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, April 12, 2022 9:18 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Subject: FW: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Nelson,

The sample date is incorrect. We will be sampling beginning tomorrow April 13, 2022.

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: Tuesday, April 12, 2022 8:16 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; 'Kyle Summers' <ksummers@ensolum.com>

Subject: FW: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Nelson,

This email is a notification that Enterprise will be conducting groundwater sampling/monitoring activities on April 12, 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: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, March 23, 2022 11:33 AM
To: Kyle Summers <ksummers@ensolum.com>
Subject: Fwd: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Tom Long

Begin forwarded message:

> **From:** "Velez, Nelson, EMNRD" <Nelson.Velez@state.nm.us>
> **Date:** March 23, 2022 at 11:23:28 AM MDT
> **To:** "Long, Thomas" <tjlong@eprod.com>
> **Cc:** "Stone, Brian" <bmstone@eprod.com>
> **Subject: RE: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964**
>
> [Use caution with links/attachments]

As per our telecommunication yesterday morning, please prepare a draft letter for the division director's approval pursuant to subsection D of section 9 of 19.15.30 NMAC.

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

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: Monday, March 21, 2022 10:00 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Nelson,

Please find the attached site map and lab reports (soil and water) for the Bruce R. Sullivan release site. All sample results are below the NMOCD Tier I soil remediation standards and NMWQQC ground water standards. As previously discussed in phone conversations, will NMOCD still accept four consecutive groundwater sampling events spaced two week apart for closing this site? Assuming all constituents of concerns remain below the NMWQQC ground water standards. Please acknowledge acceptance of the proposed alternate groundwater sampling schedule. If you have any questions, please call or email.

Thanks,

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

From: Long, Thomas
Sent: Monday, March 7, 2022 8:33 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Nelson,

This email is a notification that Enterprise will be conducting groundwater sampling/monitoring activities on March 9, 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

From: Long, Thomas
Sent: Monday, February 28, 2022 2:33 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Nelson,

This email is a notification that Enterprise will be installing groundwater monitoring wells a the 2D-1 Well Tie/Bruce R Sullivan #2 on Thursday, March 3, 2022. Drilling activities are anticipated to take one day. After monitoring well installation activities are complete, Enterprise will develop and sample the wells. I will send a subsequent notification for the groundwater sampling activities. If you have any questions, please call or email.

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

From: Long, Thomas
Sent: Monday, August 16, 2021 7:16 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Cory,

We will be collecting the water sample tomorrow instead of today. 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: Friday, August 13, 2021 7:34 AM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Cory,

This email is notification that Enterprise will be collecting a water sample from the temporary well at the 2D-1 Well Tie/Bruce R Sullivan #2 on Monday, August 16, 2021. 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: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, August 12, 2021 3:14 PM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

[Use caution with links/attachments]
Tom,

Thanks for the update please make sure to sample for 8026 full list and include Cation/Anion in the water sample.

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Thursday, August 12, 2021 2:58 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Cory,

Please find the attached site sketch and lab reports for the 2D-1 Well Tie/Bruce R Sullivan #2 excavation. We found groundwater in the excavation on the morning we sampled it. We collected a groundwater sample as well. All sample results are below NMOCD Tier I remediation standards and NMWQCC standards. Entperise install a temporary well prior to backfilling the excavation. After the temporary well has been developed and allowed to set for 24 hours, it will be purged and sampled. 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: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, August 10, 2021 8:04 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

[Use caution with links/attachments]
Tom,

__sips coffee__ my bad hehe..

Thanks for giving me everything I needed

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, August 10, 2021 8:03 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Cory,

The incident number is in the title of this 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: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, August 10, 2021 8:01 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] RE: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

[Use caution with links/attachments]
Tom,

Thanks for the update what is the incident# associated with the release?

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, August 9, 2021 2:42 PM

To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: 2D-1 Well Tie/Bruce R Sullivan #2 - UL I Section 23 T28N R10W; 36.644538, -107.857891 - Incident # nAPP2121054964

Cory,

This email is a notification that Entperise will be collecting soil samples at the 2D-1 Well Tie/Bruce R Sullivan #2 release site on Wednesday, August 11, 2021 at 11:00 a.m. 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: Kyle Summers
To: Ranee Deechilly
Subject: FW: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964
Date: Monday, December 12, 2022 1:56:49 PM
Attachments: image003.png
image004.png
image005.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: Long, Thomas <tjlong@eprod.com>
Sent: Monday, December 12, 2022 1:54 PM
To: Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

[**EXTERNAL 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: Wednesday, August 3, 2022 8:20 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

[Use caution with links/attachments]

Tom,

Thanks 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.

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

Office Hrs.:
7:00am – 12:00pm & 1:00 – 3:30 pm Mon.-Thur.
7:00am – 12:00pm & 1:00 – 4:00 pm Fri.

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, August 3, 2022 8:04 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

Nelson,

This email is a notification Enterprise will be conducting groundwater sampling/monitoring activities on August 5, 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: Friday, July 29, 2022 10:15 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

[Use caution with links/attachments]
Good morning Tom,

Thanks for the notice. The sampling event postponement due to the unsafe working environment caused by the recent weather condition is, without question, justifiable.

Once Enterprise has determined the sampling rescheduled date & time, please provide OCD, at a minimum, 48 hrs. notification prior to the event.

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

OCD greatly appreciates the correspondence and work status update.

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 29, 2022 7:49 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

Nelson,

This sampling event has been postponed until next week due to the weather and bad road conditions. I will renotify when we have it rescheduled.

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

From: Long, Thomas
Sent: Monday, July 25, 2022 8:33 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

Nelson,

This email is a notification Enterprise will be conducting groundwater sampling/monitoring activities on July 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

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, June 10, 2022 9:48 AM
To: Stone, Brian <bmstone@eprod.com>
Cc: Kyle Summers <ksummers@ensolum.com>; Long, Thomas <tjlong@eprod.com>
Subject: RE: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

[Use caution with links/attachments]
Brian,

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: Stone, Brian <bmstone@eprod.com>
Sent: Thursday, June 9, 2022 4:05 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Kyle Summers <ksummers@ensolum.com>; Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964

Nelson,

This email is a notification that Enterprise has scheduled groundwater monitoring and sampling activities for the 2D-1 Well Tie/Bruce R Sullivan #2 NAPP2121054964 site on Tuesday, June 14, 2022 at 8:00 a.m. Sampling activities are anticipated to be completed in one day. If you have any questions, please call or email. Please note that Tom Long is out of the office and will return June 20.

Brian Stone
Field Environmental Manager
Enterprise Products
(970) 210-2170

---

purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.

ENSOLUM

APPENDIX C

Tables

TABLE 1
2D-1 Well Tie/Bruce R Sullivan #2 (7/29/21)
GROUNDWATER ANALYTICAL SUMMARY - DETECTED VOLATILE ORGANIC COMPOUNDS

Sample I.D.	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4-Trimethylbenzene [1,2] (µg/L)	1,3,5-Trimethylbenzene [1,2] (µg/L)	2-Methylnaphthalene [1,2] (µg/L)
New Mexico Water Quality Control Commmission Human Health Standards		**5**	**1,000**	**700**	**620**	**30**	**NE**	**NE**	**NE**
Water Sample Collected from the Excavation (August 2021)									
EW-1*	8.11.21	**5.3**	<5.0	<5.0	<7.5	NA	NA	NA	NA
Water Samples Collected from the Temporary Sample Point (August 2021)									
MW-1	8.17.21	**33**	3.2	1.3	17	4.9	7.6	4.8	4.8
Water Samples Collected from the Temporary Monitoring Wells									
MW-1R[A]	3.9.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	4.13.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	5.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	6.14.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA	NA
	8.5.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
MW-2	3.9.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	4.13.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	5.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	6.14.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA	NA
	8.5.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
MW-3	3.9.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	4.13.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	5.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	6.14.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA	NA
	8.5.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
MW-4	3.9.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	4.13.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	5.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	6.14.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA	NA
	8.5.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
MW-5	3.9.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	4.13.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	5.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0
	6.14.22	<1.0	<1.0	<1.0	<1.5	NA	NA	NA	NA
	8.5.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<4.0

Notes:
*Concentrations in **bold** and yellow exceed the applicable WQCC HHS*
** = The sample collected from the excavation was only analyzed for benzene, toluene, ethlybenzene, and xylenes.*
[1] = Constituent is not identified as "toxic pollutant" under 20.6.2 New Mexico Administrative Code (NMAC).
[2] = Constituent is not identified as a priority pollutant under the Federal Clean Water Act (CWA).
[A] = During March 2022, temporary monitoring well MW-1R was completed to replace MW-1.
µg/L = microgram per liter
NA = Not Analyzed
NE = Not Established
<1.0 = The numeral (in this case "1.0") identifies the laboratory reporting limit (RL) or practical quantitation limit (PQL).

ENSOLUM

TABLE 2
2D-1 Well Tie/Bruce R Sullivan #2 (7/29/21) Draft
GROUNDWATER ANALYTICAL SUMMARY - INORGANICS, PHYSICAL, AND CHEMICAL PROPERTIES

Sample I.D.	Sample Date	Fluoride (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate + Nitrite (mg/L)	Bromide (mg/L)	Phosphorus (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Conductivity (µmhos/cm)	Total Alkalinity (mg/L Ca)
New Mexico Water Quality Control Commmission Human Health Standards and Domestic Water Supply Standards		1.6	250	600	11	NE	NE	NE	NE	NE	NE	1,000	NE	NE
Water Sample Collected from the Excavation (August 2021)														
EW-1*	8.11.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Water Sample Collected from the Temporary Sample Point (August 2021)														
MW-1	8.17.21	0.79	62	**4,000**	<1.00	<0.50	<2.5	530	78	13	1,300	**6,300**	7,200	427.2
Water Samples Collected from the Temporary Monitoring Wells														
MW-1R[A]	3.9.22	NA	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.13.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5.12.22	NA	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6.14.22	NA	31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8.5.22	NA	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.5.23	NA	NA	**1,900**	NA	NA	NA	NA	NA	NA	NA	**3,210**	NA	NA
MW-2	3.9.22	NA	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.13.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5.12.22	NA	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6.14.22	NA	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8.5.22	NA	26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.5.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	3.9.22	NA	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.13.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5.12.22	NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6.14.22	NA	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8.5.22	NA	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.5.23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	3.9.22	NA	8.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.13.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5.12.22	NA	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6.14.22	NA	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8.5.22	NA	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.5.23	NA	NA	**680**	NA	NA	NA	NA	NA	NA	NA	**1,210**	NA	NA

TABLE 2
2D-1 Well Tie/Bruce R Sullivan #2 (7/29/21) Draft
GROUNDWATER ANALYTICAL SUMMARY - INORGANICS, PHYSICAL, AND CHEMICAL PROPERTIES

Sample I.D.	Sample Date	Fluoride (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate + Nitrite (mg/L)	Bromide (mg/L)	Phosphorus (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Conductivity (µmhos/cm)	Total Alkalinity (mg/L Ca)
New Mexico Water Quality Control Commmission Human Health Standards and Domestic Water Supply Standards		**1.6**	**250**	**600**	**11**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**1,000**	**NE**	**NE**
MW-5	3.9.22	NA	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.13.22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5.12.22	NA	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6.14.22	NA	42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8.5.22	NA	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4.5.23	NA	NA	**4,400**	NA	NA	NA	NA	NA	NA	NA	**6,650**	NA	NA

Notes:

*Concentrations in **bold** and yellow exceed the applicable WQCC HHS or DWSS*

** = The sample collected from the excavation was only analyzed for benzene, toluene, ethlybenzene, and xylenes.*

[A] = During March 2022, temporary monitoring well MW-1R was completed to replace MW-1.

mg/L = milligram per liter

µmhos/cm = micromhos per centimeter

Ca = Calcium

NA = Not Analyzed

NE = Not Established

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

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TABLE 3
2D-1 Well Tie/Bruce R Sullivan #2 (7/29/21)
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness	Total Well Depth (feet BTOC)	Screen Interval (feet BTOC)	TOC Elevations (feet AMSL)	Groundwater Elevation[1] (feet AMSL)
MW-1R	3.9.22	ND	8.35	ND	15.57	5.57-15.57	5724.42	5716.07
	4.13.22	ND	8.22	ND				5716.20
	5.12.22	ND	8.34	ND				5716.08
	6.14.22	ND	8.90	ND				5715.52
	8.5.22	ND	9.62	ND				5714.80
MW-2	3.9.22	ND	7.53	ND	15.23	5.23-15.23	5723.43	5715.90
	4.13.22	ND	7.40	ND				5716.03
	5.12.22	ND	7.53	ND				5715.90
	6.14.22	ND	8.09	ND				5715.34
	8.5.22	ND	8.82	ND				5714.61
MW-3	3.9.22	ND	7.62	ND	15.43	5.43-15.43	5723.66	5716.04
	4.13.22	ND	7.49	ND				5716.17
	5.12.22	ND	7.63	ND				5716.03
	6.14.22	ND	8.20	ND				5715.46
	8.5.22	ND	8.95	ND				5714.71
MW-4	3.9.22	ND	7.66	ND	15.44	5.44-15.44	5723.83	5716.17
	4.13.22	ND	7.53	ND				5716.30
	5.12.22	ND	7.67	ND				5716.16
	6.14.22	ND	8.25	ND				5715.58
	8.5.22	ND	9.00	ND				5714.83
MW-5	3.9.22	ND	12.05	ND	22.58	7.58-22.58	5728.33	5716.28
	4.13.22	ND	11.93	ND				5716.40
	5.12.22	ND	12.06	ND				5716.27
	6.14.22	ND	12.60	ND				5715.73
	8.5.22	ND	13.32	ND				5715.01

Notes:
Monitoring wells were surveyed in March 2022
[1] - Groundwater elevations are listed in feet as measured at a set OPUS adjusted central point.
BTOC - below top of casing
AMSL - above mean sea level
TOC - top of casing

ENSOLUM

APPENDIX D

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: clients.hallenvironmental.com

March 18, 2022

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

RE: 2D1 Bruce R Sullivan 2 OrderNo.: 2203586

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/10/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-5
Project: 2D1 Bruce R Sullivan 2
Collection Date: 3/9/2022 9:15:00 AM
Lab ID: 2203586-001 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	45	2.5		mg/L	5	3/10/2022 5:42:22 PM	R86417
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Toluene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Ethylbenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Naphthalene	ND	2.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Acetone	ND	10		µg/L	1	3/16/2022 8:21:29 PM	R86534
Bromobenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Bromoform	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Bromomethane	ND	3.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
2-Butanone	ND	10		µg/L	1	3/16/2022 8:21:29 PM	R86534
Carbon disulfide	ND	10		µg/L	1	3/16/2022 8:21:29 PM	R86534
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Chlorobenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Chloroethane	ND	2.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Chloroform	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Chloromethane	ND	3.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Dibromomethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 9:15:00 AM
Lab ID: 2203586-001 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
2-Hexanone	ND	10		µg/L	1	3/16/2022 8:21:29 PM	R86534
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2022 8:21:29 PM	R86534
Methylene Chloride	ND	3.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Styrene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Vinyl chloride	ND	1.0		µg/L	1	3/16/2022 8:21:29 PM	R86534
Xylenes, Total	ND	1.5		µg/L	1	3/16/2022 8:21:29 PM	R86534
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%Rec	1	3/16/2022 8:21:29 PM	R86534
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	3/16/2022 8:21:29 PM	R86534
Surr: Dibromofluoromethane	89.3	70-130		%Rec	1	3/16/2022 8:21:29 PM	R86534
Surr: Toluene-d8	103	70-130		%Rec	1	3/16/2022 8:21:29 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 10:05:00 AM
Lab ID: 2203586-002 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	30	2.5		mg/L	5	3/10/2022 6:33:50 PM	R86417
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Toluene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Ethylbenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Naphthalene	ND	2.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Acetone	ND	10		µg/L	1	3/16/2022 9:47:02 PM	R86534
Bromobenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Bromoform	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Bromomethane	ND	3.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
2-Butanone	ND	10		µg/L	1	3/16/2022 9:47:02 PM	R86534
Carbon disulfide	ND	10		µg/L	1	3/16/2022 9:47:02 PM	R86534
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Chlorobenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Chloroethane	ND	2.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Chloroform	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Chloromethane	ND	3.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Dibromomethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 10:05:00 AM
Lab ID: 2203586-002 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
2-Hexanone	ND	10		µg/L	1	3/16/2022 9:47:02 PM	R86534
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2022 9:47:02 PM	R86534
Methylene Chloride	ND	3.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Styrene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Vinyl chloride	ND	1.0		µg/L	1	3/16/2022 9:47:02 PM	R86534
Xylenes, Total	ND	1.5		µg/L	1	3/16/2022 9:47:02 PM	R86534
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	3/16/2022 9:47:02 PM	R86534
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	3/16/2022 9:47:02 PM	R86534
Surr: Dibromofluoromethane	96.4	70-130		%Rec	1	3/16/2022 9:47:02 PM	R86534
Surr: Toluene-d8	104	70-130		%Rec	1	3/16/2022 9:47:02 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 10:45:00 AM
Lab ID: 2203586-003 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	11	2.5		mg/L	5	3/10/2022 6:59:34 PM	R86417
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Toluene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Ethylbenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Naphthalene	ND	2.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Acetone	ND	10		µg/L	1	3/16/2022 10:15:27 PM	R86534
Bromobenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Bromoform	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Bromomethane	ND	3.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
2-Butanone	ND	10		µg/L	1	3/16/2022 10:15:27 PM	R86534
Carbon disulfide	ND	10		µg/L	1	3/16/2022 10:15:27 PM	R86534
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Chlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Chloroethane	ND	2.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Chloroform	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Chloromethane	ND	3.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Dibromomethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 10:45:00 AM
Lab ID: 2203586-003 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
2-Hexanone	ND	10		µg/L	1	3/16/2022 10:15:27 PM	R86534
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2022 10:15:27 PM	R86534
Methylene Chloride	ND	3.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Styrene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Vinyl chloride	ND	1.0		µg/L	1	3/16/2022 10:15:27 PM	R86534
Xylenes, Total	ND	1.5		µg/L	1	3/16/2022 10:15:27 PM	R86534
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%Rec	1	3/16/2022 10:15:27 PM	R86534
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	3/16/2022 10:15:27 PM	R86534
Surr: Dibromofluoromethane	91.4	70-130		%Rec	1	3/16/2022 10:15:27 PM	R86534
Surr: Toluene-d8	101	70-130		%Rec	1	3/16/2022 10:15:27 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 11:20:00 AM
Lab ID: 2203586-004 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	8.8	2.5		mg/L	5	3/10/2022 7:25:18 PM	R86417
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Toluene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Ethylbenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Naphthalene	ND	2.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Acetone	ND	10		µg/L	1	3/16/2022 10:43:59 PM	R86534
Bromobenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Bromoform	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Bromomethane	ND	3.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
2-Butanone	ND	10		µg/L	1	3/16/2022 10:43:59 PM	R86534
Carbon disulfide	ND	10		µg/L	1	3/16/2022 10:43:59 PM	R86534
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Chlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Chloroethane	ND	2.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Chloroform	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Chloromethane	ND	3.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Dibromomethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 11:20:00 AM
Lab ID: 2203586-004 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
2-Hexanone	ND	10		µg/L	1	3/16/2022 10:43:59 PM	R86534
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2022 10:43:59 PM	R86534
Methylene Chloride	ND	3.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Styrene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Vinyl chloride	ND	1.0		µg/L	1	3/16/2022 10:43:59 PM	R86534
Xylenes, Total	ND	1.5		µg/L	1	3/16/2022 10:43:59 PM	R86534
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%Rec	1	3/16/2022 10:43:59 PM	R86534
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	3/16/2022 10:43:59 PM	R86534
Surr: Dibromofluoromethane	91.8	70-130		%Rec	1	3/16/2022 10:43:59 PM	R86534
Surr: Toluene-d8	103	70-130		%Rec	1	3/16/2022 10:43:59 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1R
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 12:05:00 PM
Lab ID: 2203586-005 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LRN**	
Chloride	49	2.5		mg/L	5	3/10/2022 7:51:01 PM	R86417
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Toluene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Ethylbenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Naphthalene	ND	2.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
2-Methylnaphthalene	ND	4.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Acetone	ND	10		µg/L	1	3/16/2022 11:12:34 PM	R86534
Bromobenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Bromodichloromethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Bromoform	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Bromomethane	ND	3.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
2-Butanone	ND	10		µg/L	1	3/16/2022 11:12:34 PM	R86534
Carbon disulfide	ND	10		µg/L	1	3/16/2022 11:12:34 PM	R86534
Carbon Tetrachloride	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Chlorobenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Chloroethane	ND	2.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Chloroform	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Chloromethane	ND	3.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
2-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
4-Chlorotoluene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
cis-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Dibromochloromethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Dibromomethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,1-Dichloroethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,1-Dichloroethene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534

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 **2203586**
Date Reported: **3/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1R
Project: 2D1 Bruce R Sullivan 2 **Collection Date:** 3/9/2022 12:05:00 PM
Lab ID: 2203586-005 **Matrix:** AQUEOUS **Received Date:** 3/10/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichloropropane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
2,2-Dichloropropane	ND	2.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,1-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Hexachlorobutadiene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
2-Hexanone	ND	10		µg/L	1	3/16/2022 11:12:34 PM	R86534
Isopropylbenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
4-Isopropyltoluene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
4-Methyl-2-pentanone	ND	10		µg/L	1	3/16/2022 11:12:34 PM	R86534
Methylene Chloride	ND	3.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
n-Butylbenzene	ND	3.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
n-Propylbenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
sec-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Styrene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
tert-Butylbenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
trans-1,2-DCE	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Trichlorofluoromethane	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Vinyl chloride	ND	1.0		µg/L	1	3/16/2022 11:12:34 PM	R86534
Xylenes, Total	ND	1.5		µg/L	1	3/16/2022 11:12:34 PM	R86534
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	3/16/2022 11:12:34 PM	R86534
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	3/16/2022 11:12:34 PM	R86534
Surr: Dibromofluoromethane	94.3	70-130		%Rec	1	3/16/2022 11:12:34 PM	R86534
Surr: Toluene-d8	103	70-130		%Rec	1	3/16/2022 11:12:34 PM	R86534

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#: **2203586**

18-Mar-22

Client: ENSOLUM

Project: 2D1 Bruce R Sullivan 2

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R86417**	RunNo: **86417**
Prep Date:	Analysis Date: **3/10/2022**	SeqNo: **3048600** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R86417**	RunNo: **86417**
Prep Date:	Analysis Date: **3/10/2022**	SeqNo: **3048601** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.5	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#: **2203586**
18-Mar-22

Client: ENSOLUM
Project: 2D1 Bruce R Sullivan 2

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R86534** RunNo: **86534**
Prep Date: Analysis Date: **3/16/2022** SeqNo: **3053797** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	22	1.0	20.00	0	110	70	130			
Chlorobenzene	22	1.0	20.00	0	111	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.3	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **2203586-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-5** Batch ID: **R86534** RunNo: **86534**
Prep Date: Analysis Date: **3/16/2022** SeqNo: **3053800** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.1	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	84.9	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	81.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.7	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.1	70	130			
Surr: Dibromofluoromethane	9.2		10.00		91.9	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Sample ID: **2203586-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-5** Batch ID: **R86534** RunNo: **86534**
Prep Date: Analysis Date: **3/16/2022** SeqNo: **3053801** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	88.0	70	130	8.83	20	
Toluene	19	1.0	20.00	0	94.3	70	130	10.4	20	
Chlorobenzene	19	1.0	20.00	0	95.3	70	130	7.53	20	
1,1-Dichloroethene	16	1.0	20.00	0	81.7	70	130	3.87	20	
Trichloroethene (TCE)	15	1.0	20.00	0	77.3	70	130	5.65	20	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		93.4	70	130	0	0	
Surr: Toluene-d8	9.9		10.00		99.1	70	130	0	0	

Qualifiers:

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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#: **2203586**
18-Mar-22

Client: ENSOLUM
Project: 2D1 Bruce R Sullivan 2

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R86534** RunNo: **86534**
Prep Date: Analysis Date: **3/16/2022** SeqNo: **3053806** 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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2203586**

18-Mar-22

Client: ENSOLUM

Project: 2D1 Bruce R Sullivan 2

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R86534**	RunNo: **86534**
Prep Date:	Analysis Date: **3/16/2022**	SeqNo: **3053806** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.4	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: ENSOLUM | Work Order Number: 2203586 | RcptNo: 1

Received By: Tracy Casarrubias 3/10/2022 8:00:00 AM

Completed By: Tracy Casarrubias 3/10/2022 9:22:16 AM

Reviewed By: JA 3-10-22

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 ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: JA 3/10/22

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	0.1	Good	Yes			

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: 2D-1 / Bruce R Sullivan #2

Project #: see notes

Project Manager: Ksummers

Sampler: RDeechilly

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 0.1 - 0 = 0.1 (°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. 2203586	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) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
3/9/22	915	W	MW-5	Various	Various	001								X			X
3/9/22	1005	W	MW-2	Various	Various	002								X			X
3/9/22	1045	W	MW-3	Various	Various	003								X			X
3/9/22	1120	W	MW-4	Various	Various	004								X			X
3/9/22	1205	W	MW-1R	Various	Various	005								X			X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/9/22	1504		Matt Wall		3/9/22	1504
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/9/22	1804	Matthew Wall		courier	3/10/22	8:00

Remarks: PM - Tom Long (EPROD)
NonAFE - N54659
Pay Key - RB21200

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, 2022

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

RE: Bruce R Sullivan 2 OrderNo.: 2204650

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/13/2022 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 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 **2204650**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-5
Project: Bruce R Sullivan 2
Collection Date: 4/13/2022 9:20:00 AM
Lab ID: 2204650-001 **Matrix:** AQUEOUS **Received Date:** 4/13/2022 1:56:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
Toluene	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
Ethylbenzene	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
Naphthalene	ND	2.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 4:18:28 PM	R87357
Xylenes, Total	ND	1.5		µg/L	1	4/19/2022 4:18:28 PM	R87357
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	4/19/2022 4:18:28 PM	R87357
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	4/19/2022 4:18:28 PM	R87357
Surr: Dibromofluoromethane	108	70-130		%Rec	1	4/19/2022 4:18:28 PM	R87357
Surr: Toluene-d8	95.7	70-130		%Rec	1	4/19/2022 4:18:28 PM	R87357

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 **2204650**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-4
Project: Bruce R Sullivan 2
Collection Date: 4/13/2022 9:50:00 AM
Lab ID: 2204650-002 **Matrix:** AQUEOUS **Received Date:** 4/13/2022 1:56:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
Toluene	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
Ethylbenzene	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
Naphthalene	ND	2.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 4:46:55 PM	R87357
Xylenes, Total	ND	1.5		µg/L	1	4/19/2022 4:46:55 PM	R87357
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	4/19/2022 4:46:55 PM	R87357
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	4/19/2022 4:46:55 PM	R87357
Surr: Dibromofluoromethane	113	70-130		%Rec	1	4/19/2022 4:46:55 PM	R87357
Surr: Toluene-d8	97.0	70-130		%Rec	1	4/19/2022 4:46:55 PM	R87357

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 **2204650**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: Bruce R Sullivan 2 **Collection Date:** 4/13/2022 10:30:00 AM
Lab ID: 2204650-003 **Matrix:** AQUEOUS **Received Date:** 4/13/2022 1:56:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
Toluene	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
Ethylbenzene	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
Naphthalene	ND	2.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 5:15:25 PM	R87357
Xylenes, Total	ND	1.5		µg/L	1	4/19/2022 5:15:25 PM	R87357
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/19/2022 5:15:25 PM	R87357
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/19/2022 5:15:25 PM	R87357
Surr: Dibromofluoromethane	112	70-130		%Rec	1	4/19/2022 5:15:25 PM	R87357
Surr: Toluene-d8	95.9	70-130		%Rec	1	4/19/2022 5:15:25 PM	R87357

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 **2204650**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: Bruce R Sullivan 2 **Collection Date:** 4/13/2022 11:30:00 AM
Lab ID: 2204650-004 **Matrix:** AQUEOUS **Received Date:** 4/13/2022 1:56:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
Toluene	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
Ethylbenzene	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
Naphthalene	ND	2.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 5:44:06 PM	R87357
Xylenes, Total	ND	1.5		µg/L	1	4/19/2022 5:44:06 PM	R87357
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	4/19/2022 5:44:06 PM	R87357
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/19/2022 5:44:06 PM	R87357
Surr: Dibromofluoromethane	115	70-130		%Rec	1	4/19/2022 5:44:06 PM	R87357
Surr: Toluene-d8	97.9	70-130		%Rec	1	4/19/2022 5:44:06 PM	R87357

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 **2204650**
Date Reported: **4/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1R
Project: Bruce R Sullivan 2 **Collection Date:** 4/13/2022 12:25:00 PM
Lab ID: 2204650-005 **Matrix:** AQUEOUS **Received Date:** 4/13/2022 1:56:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
Toluene	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
Ethylbenzene	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
Naphthalene	ND	2.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2022 6:12:37 PM	R87357
Xylenes, Total	ND	1.5		µg/L	1	4/19/2022 6:12:37 PM	R87357
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%Rec	1	4/19/2022 6:12:37 PM	R87357
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	4/19/2022 6:12:37 PM	R87357
Surr: Dibromofluoromethane	110	70-130		%Rec	1	4/19/2022 6:12:37 PM	R87357
Surr: Toluene-d8	96.3	70-130		%Rec	1	4/19/2022 6:12:37 PM	R87357

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#: **2204650**

21-Apr-22

Client: ENSOLUM

Project: Bruce R Sullivan 2

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R87357**	RunNo: **87357**
Prep Date:	Analysis Date: **4/19/2022**	SeqNo: **3090021** 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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.7	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R87357**	RunNo: **87357**
Prep Date:	Analysis Date: **4/19/2022**	SeqNo: **3090035** Units: **µg/L**

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			
Toluene	18	1.0	20.00	0	91.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.8	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	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: 2204650 | RcptNo: 1

Received By: **Tracy Casarrubias** 4/13/2022 1:56:00 PM

Completed By: **Tracy Casarrubias** 4/14/2022 10:19:48 AM

Reviewed By: 4-14-22

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)? Samples not Frozen — 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 preserved 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: IO 04/14/2022 (<2 or >12 unless noted)
Adjusted?
Checked by:

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			
2	0.3	Good	Yes			
3	-0.3	Good	Yes			
4	2.1	Good	Yes			

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: 2204650

RcptNo: 1

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
5	2.6	Good	Yes			

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: Bruce B Sullivan 2

Project #:

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2204650	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) Short list including BTEX	8270 (Semi-VOA)	Total Coliform (Present/Absent)
4/13/22	9:20	W	MW-5	3x40mL VOA	HgCl2	001								X		
4/13/22	9:50	W	MW-4			002								X		
4/13/22	10:30	W	MW-3			003								X		
4/13/22	11:30	W	MW-2			004								X		
4/13/22	12:25	W	MW-1R			005								X		

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/13/22	1356				4/13/22	1356
4/13/22	1824	Christian Waeke			4/14/22	9:00

Remarks: PM Tom Long
Pay Key RB21200
Non AFE: 546559

0.6	0.6	
0.8	0.8	
-0.8	-0.8	
2.1	2.1	
2.6	2.6	

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

May 18, 2022

Kyle Summers

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

RE: Bruce R Sullivan 2 OrderNo.: 2205636

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/13/2022 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 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 **2205636**
Date Reported: **5/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-4
Project: Bruce R Sullivan 2
Collection Date: 5/12/2022 9:45:00 AM
Lab ID: 2205636-001 **Matrix:** AQUEOUS **Received Date:** 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	14	5.0		mg/L	10	5/13/2022 5:51:34 PM	R88012
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
Toluene	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
Ethylbenzene	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
Naphthalene	ND	2.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
1-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
2-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 6:31:09 PM	R88039
Xylenes, Total	ND	1.5		µg/L	1	5/16/2022 6:31:09 PM	R88039
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	5/16/2022 6:31:09 PM	R88039
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	5/16/2022 6:31:09 PM	R88039
Surr: Dibromofluoromethane	113	70-130		%Rec	1	5/16/2022 6:31:09 PM	R88039
Surr: Toluene-d8	95.0	70-130		%Rec	1	5/16/2022 6:31:09 PM	R88039

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 **2205636**
Date Reported: **5/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: Bruce R Sullivan 2 **Collection Date:** 5/12/2022 10:25:00 AM
Lab ID: 2205636-002 **Matrix:** AQUEOUS **Received Date:** 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	13	5.0		mg/L	10	5/13/2022 6:17:18 PM	R88012
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
Toluene	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
Ethylbenzene	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
Naphthalene	ND	2.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
1-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
2-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 7:57:04 PM	R88039
Xylenes, Total	ND	1.5		µg/L	1	5/16/2022 7:57:04 PM	R88039
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	5/16/2022 7:57:04 PM	R88039
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	5/16/2022 7:57:04 PM	R88039
Surr: Dibromofluoromethane	116	70-130		%Rec	1	5/16/2022 7:57:04 PM	R88039
Surr: Toluene-d8	96.0	70-130		%Rec	1	5/16/2022 7:57:04 PM	R88039

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 **2205636**
Date Reported: **5/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-2
Project: Bruce R Sullivan 2
Collection Date: 5/12/2022 11:20:00 AM
Lab ID: 2205636-003 **Matrix:** AQUEOUS **Received Date:** 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	24	5.0		mg/L	10	5/13/2022 7:08:47 PM	R88012
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
Toluene	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
Ethylbenzene	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
Naphthalene	ND	2.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
1-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
2-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 8:25:40 PM	R88039
Xylenes, Total	ND	1.5		µg/L	1	5/16/2022 8:25:40 PM	R88039
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	5/16/2022 8:25:40 PM	R88039
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	5/16/2022 8:25:40 PM	R88039
Surr: Dibromofluoromethane	115	70-130		%Rec	1	5/16/2022 8:25:40 PM	R88039
Surr: Toluene-d8	93.8	70-130		%Rec	1	5/16/2022 8:25:40 PM	R88039

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 **2205636**
Date Reported: **5/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-1R
Project: Bruce R Sullivan 2
Collection Date: 5/12/2022 12:25:00 PM
Lab ID: 2205636-004 **Matrix:** AQUEOUS **Received Date:** 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	30	5.0		mg/L	10	5/13/2022 7:34:31 PM	R88012
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
Toluene	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
Ethylbenzene	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
Naphthalene	ND	2.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
1-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
2-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 8:54:14 PM	R88039
Xylenes, Total	ND	1.5		µg/L	1	5/16/2022 8:54:14 PM	R88039
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	5/16/2022 8:54:14 PM	R88039
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	5/16/2022 8:54:14 PM	R88039
Surr: Dibromofluoromethane	112	70-130		%Rec	1	5/16/2022 8:54:14 PM	R88039
Surr: Toluene-d8	95.6	70-130		%Rec	1	5/16/2022 8:54:14 PM	R88039

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 **2205636**
Date Reported: **5/18/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-5
Project: Bruce R Sullivan 2
Collection Date: 5/12/2022 1:10:00 PM
Lab ID: 2205636-005 **Matrix:** AQUEOUS **Received Date:** 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	40	5.0		mg/L	10	5/13/2022 8:26:00 PM	R88012
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
Toluene	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
Ethylbenzene	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
Naphthalene	ND	2.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
1-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
2-Methylnaphthalene	ND	4.0		µg/L	1	5/16/2022 9:22:46 PM	R88039
Xylenes, Total	ND	1.5		µg/L	1	5/16/2022 9:22:46 PM	R88039
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%Rec	1	5/16/2022 9:22:46 PM	R88039
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	5/16/2022 9:22:46 PM	R88039
Surr: Dibromofluoromethane	113	70-130		%Rec	1	5/16/2022 9:22:46 PM	R88039
Surr: Toluene-d8	94.8	70-130		%Rec	1	5/16/2022 9:22:46 PM	R88039

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#: **2205636**

18-May-22

Client: ENSOLUM

Project: Bruce R Sullivan 2

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R88012**	RunNo: **88012**
Prep Date:	Analysis Date: **5/13/2022**	SeqNo: **3119590** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R88012**	RunNo: **88012**
Prep Date:	Analysis Date: **5/13/2022**	SeqNo: **3119591** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.4	90	110			

Sample ID: **2205636-002BMS**	SampType: **ms**	TestCode: **EPA Method 300.0: Anions**
Client ID: **MW-3**	Batch ID: **R88012**	RunNo: **88012**
Prep Date:	Analysis Date: **5/13/2022**	SeqNo: **3119614** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	58	5.0	50.00	12.84	91.2	86.3	114			

Sample ID: **2205636-002BMSD**	SampType: **msd**	TestCode: **EPA Method 300.0: Anions**
Client ID: **MW-3**	Batch ID: **R88012**	RunNo: **88012**
Prep Date:	Analysis Date: **5/13/2022**	SeqNo: **3119615** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	59	5.0	50.00	12.84	91.4	86.3	114	0.179	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix 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#: **2205636**

18-May-22

Client: ENSOLUM

Project: Bruce R Sullivan 2

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

Client ID: **LCSW** Batch ID: **R88039** RunNo: **88039**

Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120851** Units: **µg/L**

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	18	1.0	20.00	0	87.9	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.4	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.9	70	130			
Surr: Dibromofluoromethane	7.8		10.00		78.4	70	130			
Surr: Toluene-d8	9.1		10.00		91.1	70	130			

Sample ID: **2205636-001ams** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-4** Batch ID: **R88039** RunNo: **88039**

Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120853** Units: **µg/L**

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	18	1.0	20.00	0	92.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130			
Surr: Dibromofluoromethane	11		10.00		113	70	130			
Surr: Toluene-d8	9.3		10.00		93.1	70	130			

Sample ID: **2205636-001amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**

Client ID: **MW-4** Batch ID: **R88039** RunNo: **88039**

Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120854** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130	7.90	20	
Toluene	17	1.0	20.00	0	84.8	70	130	8.13	20	
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		113	70	130	0	0	
Surr: Toluene-d8	9.2		10.00		91.8	70	130	0	0	

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

Client ID: **PBW** Batch ID: **R88039** RunNo: **88039**

Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120859** 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								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2205636**

18-May-22

Client: ENSOLUM

Project: Bruce R Sullivan 2

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R88039**	RunNo: **88039**
Prep Date:	Analysis Date: **5/16/2022**	SeqNo: **3120859** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	7.6		10.00		75.8	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	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: 2205636 RcptNo: 1

Received By: Juan Rojas 5/13/2022 7:00:00 AM

Completed By: Tracy Casarrubias 5/13/2022 9:42:58 AM

Reviewed By: CMC 5/13/22

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° 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: KPG 5.13.22

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Yes			

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: Bruce R Sullivan #2

Project #: 05A1226149

Project Manager: K. Summers

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2205636	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, NO3, NO2, PO4, SO4	8260 (VOA) Short list + including BTEX	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5/12/22	9:45	W	MW-4	1x500mL 3x40mL VOA	$HgCl_2$	001							X	X		
5/12/22	10:25	W	MW-3			002							X	X		
5/12/22	11:20	W	MW-2			003							X	X		
5/12/22	12:25	W	MW-1R			004							X	X		
5/12/22	13:10	W	MW-5		$HgCl_2$ ☆	005							X	X		

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
5/12/22	1537				5/12/22	1537
5/12/22	1817				5/13/22	7:00

Remarks:
PM Tom Long
Pay Key: RBLI200
Non AFE: 54659

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 20, 2022

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

RE: Bruce R Sullivan 2 OrderNo.: 2206779

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/15/2022 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 **2206779**
Date Reported: **6/20/2022**

CLIENT: ENSOLUM
Client Sample ID: MW-4
Project: Bruce R Sullivan 2
Collection Date: 6/14/2022 9:05:00 AM
Lab ID: 2206779-001 **Matrix:** AQUEOUS **Received Date:** 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	22	5.0		mg/L	10	6/15/2022 11:53:36 PM	A88779
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/16/2022 6:18:00 AM	SL88743
Toluene	ND	1.0		µg/L	1	6/16/2022 6:18:00 AM	SL88743
Ethylbenzene	ND	1.0		µg/L	1	6/16/2022 6:18:00 AM	SL88743
Xylenes, Total	ND	1.5		µg/L	1	6/16/2022 6:18:00 AM	SL88743
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%Rec	1	6/16/2022 6:18:00 AM	SL88743
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	6/16/2022 6:18:00 AM	SL88743
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/16/2022 6:18:00 AM	SL88743
Surr: Toluene-d8	95.3	70-130		%Rec	1	6/16/2022 6:18:00 AM	SL88743

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2206779**
Date Reported: **6/20/2022**

CLIENT: ENSOLUM
Client Sample ID: MW-3
Project: Bruce R Sullivan 2
Collection Date: 6/14/2022 9:50:00 AM
Lab ID: 2206779-002 **Matrix:** AQUEOUS **Received Date:** 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	18	5.0		mg/L	10	6/16/2022 12:18:25 AM	A88779
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/16/2022 6:41:00 AM	SL88743
Toluene	ND	1.0		µg/L	1	6/16/2022 6:41:00 AM	SL88743
Ethylbenzene	ND	1.0		µg/L	1	6/16/2022 6:41:00 AM	SL88743
Xylenes, Total	ND	1.5		µg/L	1	6/16/2022 6:41:00 AM	SL88743
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%Rec	1	6/16/2022 6:41:00 AM	SL88743
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	6/16/2022 6:41:00 AM	SL88743
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/16/2022 6:41:00 AM	SL88743
Surr: Toluene-d8	94.7	70-130		%Rec	1	6/16/2022 6:41:00 AM	SL88743

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 **2206779**
Date Reported: **6/20/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: Bruce R Sullivan 2 **Collection Date:** 6/14/2022 10:55:00 AM
Lab ID: 2206779-003 **Matrix:** AQUEOUS **Received Date:** 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	25	5.0		mg/L	10	6/16/2022 12:43:14 AM	A88779
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/16/2022 7:04:00 AM	SL88743
Toluene	ND	1.0		µg/L	1	6/16/2022 7:04:00 AM	SL88743
Ethylbenzene	ND	1.0		µg/L	1	6/16/2022 7:04:00 AM	SL88743
Xylenes, Total	ND	1.5		µg/L	1	6/16/2022 7:04:00 AM	SL88743
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%Rec	1	6/16/2022 7:04:00 AM	SL88743
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	6/16/2022 7:04:00 AM	SL88743
Surr: Dibromofluoromethane	99.7	70-130		%Rec	1	6/16/2022 7:04:00 AM	SL88743
Surr: Toluene-d8	94.8	70-130		%Rec	1	6/16/2022 7:04:00 AM	SL88743

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 **2206779**
Date Reported: **6/20/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1R
Project: Bruce R Sullivan 2 **Collection Date:** 6/14/2022 11:55:00 AM
Lab ID: 2206779-004 **Matrix:** AQUEOUS **Received Date:** 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	31	5.0		mg/L	10	6/16/2022 1:08:03 AM	A88779
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/16/2022 7:27:00 AM	SL88743
Toluene	ND	1.0		µg/L	1	6/16/2022 7:27:00 AM	SL88743
Ethylbenzene	ND	1.0		µg/L	1	6/16/2022 7:27:00 AM	SL88743
Xylenes, Total	ND	1.5		µg/L	1	6/16/2022 7:27:00 AM	SL88743
Surr: 1,2-Dichloroethane-d4	89.9	70-130		%Rec	1	6/16/2022 7:27:00 AM	SL88743
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	6/16/2022 7:27:00 AM	SL88743
Surr: Dibromofluoromethane	99.3	70-130		%Rec	1	6/16/2022 7:27:00 AM	SL88743
Surr: Toluene-d8	95.6	70-130		%Rec	1	6/16/2022 7:27:00 AM	SL88743

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 **2206779**
Date Reported: **6/20/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: Bruce R Sullivan 2 **Collection Date:** 6/14/2022 12:30:00 PM
Lab ID: 2206779-005 **Matrix:** AQUEOUS **Received Date:** 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	42	5.0		mg/L	10	6/16/2022 1:57:42 AM	A88779
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/16/2022 7:50:00 AM	SL88743
Toluene	ND	1.0		µg/L	1	6/16/2022 7:50:00 AM	SL88743
Ethylbenzene	ND	1.0		µg/L	1	6/16/2022 7:50:00 AM	SL88743
Xylenes, Total	ND	1.5		µg/L	1	6/16/2022 7:50:00 AM	SL88743
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%Rec	1	6/16/2022 7:50:00 AM	SL88743
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	6/16/2022 7:50:00 AM	SL88743
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	6/16/2022 7:50:00 AM	SL88743
Surr: Toluene-d8	95.6	70-130		%Rec	1	6/16/2022 7:50:00 AM	SL88743

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#: **2206779**

20-Jun-22

Client: ENSOLUM

Project: Bruce R Sullivan 2

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **A88779**	RunNo: **88779**
Prep Date:	Analysis Date: **6/15/2022**	SeqNo: **3152033** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **A88779**	RunNo: **88779**
Prep Date:	Analysis Date: **6/15/2022**	SeqNo: **3152034** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.5	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#: **2206779**

20-Jun-22

Client: ENSOLUM

Project: Bruce R Sullivan 2

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL88743**	RunNo: **88743**
Prep Date:	Analysis Date: **6/15/2022**	SeqNo: **3152792** 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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.5	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.4		10.00		94.2	70	130			

Sample ID: **100NG LCS**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL88743**	RunNo: **88743**
Prep Date:	Analysis Date: **6/15/2022**	SeqNo: **3152793** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.5	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	9.6		10.00		95.5	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.8	70	130			
Surr: Toluene-d8	9.6		10.00		96.2	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: 2206779 | RcptNo: 1

Received By: Cheyenne Cason 6/15/2022 7:00:00 AM

Completed By: Sean Livingston 6/15/2022 8:01:07 AM

Reviewed By: JR 6/15/22

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: KPG 6.15.22

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	1.1	Good				
2	2.7	Good				

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:
5 day
☒ Standard ☐ Rush

Project Name: Bruce R Sullivan #2

Project #: SEE NOTES

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 2 1.1-0=1.1

Cooler Temp(including CF): 2.7-0=2.7 (°C)

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2206779	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) Short list + including BTEX	8270 (Semi-VOA)	Total Coliform (Present/Absent)
6/14/22	9:05	W	MW-4	3x 40ml VOA, 1 500ml bottle	HgCl2	001							X	X		
6/14/22	9:50	W	MW-3	3x 40ml VOA, 1 500ml bottle		002							X	X		
6/14/22	10:55	W	MW-2	3x 40ml VOA, 1 500ml bottle		003							X	X		
6/14/22	11:55	W	MW-1R	3x 40ml VOA, 1 500ml bottle		004							X	X		
6/14/22	12:30	W	MW-5	3x 40ml VOA, 1 500ml bottle		005							X	X		

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6/14/22	1409				6/14/22	1409
6/14/22	1811					
			CMC	Courier	6/15/22	0700

Remarks: PM TeamLong
Non AFE: N54659
Pay Key: RB21200

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

August 22, 2022

Kyle Summers

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

RE: 20 1 Bruce R Sullivan 2 OrderNo.: 2208423

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/6/2022 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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1R
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 9:10:00 AM
Lab ID: 2208423-001 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	22	5.0		mg/L	10	8/13/2022 3:03:03 AM	A90235
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Toluene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Naphthalene	ND	2.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Acetone	ND	10		µg/L	1	8/10/2022 7:40:00 PM	R90188
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Bromoform	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Bromomethane	ND	3.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
2-Butanone	ND	10		µg/L	1	8/10/2022 7:40:00 PM	R90188
Carbon disulfide	ND	10		µg/L	1	8/10/2022 7:40:00 PM	R90188
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Chloroethane	ND	2.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Chloroform	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Chloromethane	ND	3.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188

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

Qualifiers:

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

Analytical Report
Lab Order **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-1R
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 9:10:00 AM
Lab ID: 2208423-001 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
2-Hexanone	ND	10		µg/L	1	8/10/2022 7:40:00 PM	R90188
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 7:40:00 PM	R90188
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Styrene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 7:40:00 PM	R90188
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 7:40:00 PM	R90188
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	8/10/2022 7:40:00 PM	R90188
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	8/10/2022 7:40:00 PM	R90188
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/10/2022 7:40:00 PM	R90188
Surr: Toluene-d8	92.2	70-130		%Rec	1	8/10/2022 7:40:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 10:00:00 AM
Lab ID: 2208423-002 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **NAI**	
Chloride	26	5.0		mg/L	10	8/13/2022 3:27:52 AM	A90235
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Toluene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Naphthalene	ND	2.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Acetone	ND	10		µg/L	1	8/10/2022 8:03:00 PM	R90188
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Bromoform	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Bromomethane	ND	3.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
2-Butanone	ND	10		µg/L	1	8/10/2022 8:03:00 PM	R90188
Carbon disulfide	ND	10		µg/L	1	8/10/2022 8:03:00 PM	R90188
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Chloroethane	ND	2.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Chloroform	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Chloromethane	ND	3.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-2
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 10:00:00 AM
Lab ID: 2208423-002 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
2-Hexanone	ND	10		µg/L	1	8/10/2022 8:03:00 PM	R90188
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 8:03:00 PM	R90188
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Styrene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 8:03:00 PM	R90188
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 8:03:00 PM	R90188
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	8/10/2022 8:03:00 PM	R90188
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	8/10/2022 8:03:00 PM	R90188
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/10/2022 8:03:00 PM	R90188
Surr: Toluene-d8	92.2	70-130		%Rec	1	8/10/2022 8:03:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 10:40:00 AM
Lab ID: 2208423-003 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	23	5.0		mg/L	10	8/11/2022 12:39:04 PM	R90213
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Toluene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Naphthalene	ND	2.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Acetone	ND	10		µg/L	1	8/10/2022 8:26:00 PM	R90188
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Bromoform	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Bromomethane	ND	3.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
2-Butanone	ND	10		µg/L	1	8/10/2022 8:26:00 PM	R90188
Carbon disulfide	ND	10		µg/L	1	8/10/2022 8:26:00 PM	R90188
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Chloroethane	ND	2.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Chloroform	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Chloromethane	ND	3.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-3
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 10:40:00 AM
Lab ID: 2208423-003 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
2-Hexanone	ND	10		µg/L	1	8/10/2022 8:26:00 PM	R90188
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 8:26:00 PM	R90188
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Styrene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 8:26:00 PM	R90188
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 8:26:00 PM	R90188
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	8/10/2022 8:26:00 PM	R90188
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	8/10/2022 8:26:00 PM	R90188
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/10/2022 8:26:00 PM	R90188
Surr: Toluene-d8	90.9	70-130		%Rec	1	8/10/2022 8:26:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 11:15:00 AM
Lab ID: 2208423-004 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	27	5.0		mg/L	10	8/11/2022 1:03:54 PM	R90213
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Toluene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Naphthalene	ND	2.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Acetone	ND	10		µg/L	1	8/10/2022 8:49:00 PM	R90188
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Bromoform	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Bromomethane	ND	3.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
2-Butanone	ND	10		µg/L	1	8/10/2022 8:49:00 PM	R90188
Carbon disulfide	ND	10		µg/L	1	8/10/2022 8:49:00 PM	R90188
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Chloroethane	ND	2.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Chloroform	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Chloromethane	ND	3.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-4
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 11:15:00 AM
Lab ID: 2208423-004 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
2-Hexanone	ND	10		µg/L	1	8/10/2022 8:49:00 PM	R90188
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 8:49:00 PM	R90188
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Styrene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 8:49:00 PM	R90188
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 8:49:00 PM	R90188
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	8/10/2022 8:49:00 PM	R90188
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	8/10/2022 8:49:00 PM	R90188
Surr: Dibromofluoromethane	110	70-130		%Rec	1	8/10/2022 8:49:00 PM	R90188
Surr: Toluene-d8	91.7	70-130		%Rec	1	8/10/2022 8:49:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 11:55:00 AM
Lab ID: 2208423-005 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JTT**	
Chloride	37	5.0		mg/L	10	8/11/2022 1:28:44 PM	R90213
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Toluene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Naphthalene	ND	2.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Acetone	ND	10		µg/L	1	8/10/2022 9:12:00 PM	R90188
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Bromoform	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Bromomethane	ND	3.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
2-Butanone	ND	10		µg/L	1	8/10/2022 9:12:00 PM	R90188
Carbon disulfide	ND	10		µg/L	1	8/10/2022 9:12:00 PM	R90188
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Chloroethane	ND	2.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Chloroform	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Chloromethane	ND	3.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188

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 **2208423**
Date Reported: **8/22/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** MW-5
Project: 20 1 Bruce R Sullivan 2 **Collection Date:** 8/5/2022 11:55:00 AM
Lab ID: 2208423-005 **Matrix:** AQUEOUS **Received Date:** 8/6/2022 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
2-Hexanone	ND	10		µg/L	1	8/10/2022 9:12:00 PM	R90188
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 9:12:00 PM	R90188
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Styrene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 9:12:00 PM	R90188
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 9:12:00 PM	R90188
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	8/10/2022 9:12:00 PM	R90188
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	8/10/2022 9:12:00 PM	R90188
Surr: Dibromofluoromethane	109	70-130		%Rec	1	8/10/2022 9:12:00 PM	R90188
Surr: Toluene-d8	91.5	70-130		%Rec	1	8/10/2022 9:12:00 PM	R90188

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#: **2208423**

22-Aug-22

Client: ENSOLUM

Project: 20 1 Bruce R Sullivan 2

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **R90213** RunNo: **90213**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217282** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **R90213** RunNo: **90213**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217283** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	91.8	90	110			

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **A90235** RunNo: **90235**
Prep Date: Analysis Date: **8/13/2022** SeqNo: **3219880** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **A90235** RunNo: **90235**
Prep Date: Analysis Date: **8/13/2022** SeqNo: **3219881** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.6	90	110			

Sample ID: **2208423-002BMS** SampType: **ms** TestCode: **EPA Method 300.0: Anions**
Client ID: **MW-2** Batch ID: **A90235** RunNo: **90235**
Prep Date: Analysis Date: **8/13/2022** SeqNo: **3219885** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	73	5.0	50.00	25.76	93.8	86.3	114			

Sample ID: **2208423-002BMSD** SampType: **msd** TestCode: **EPA Method 300.0: Anions**
Client ID: **MW-2** Batch ID: **A90235** RunNo: **90235**
Prep Date: Analysis Date: **8/13/2022** SeqNo: **3219886** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	73	5.0	50.00	25.76	93.7	86.3	114	0.0110	20	

Qualifiers:

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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#: **2208423**
22-Aug-22

Client: ENSOLUM
Project: 20 1 Bruce R Sullivan 2

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R90188** RunNo: **90188**
Prep Date: Analysis Date: **8/10/2022** SeqNo: **3216145** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	20	1.0	20.00	0	98.5	70	130			
Chlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.8	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		114	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.3		10.00		92.9	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90188** RunNo: **90188**
Prep Date: Analysis Date: **8/10/2022** SeqNo: **3216147** 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								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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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#: **2208423**
22-Aug-22

Client: ENSOLUM
Project: 20 1 Bruce R Sullivan 2

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90188** RunNo: **90188**
Prep Date: Analysis Date: **8/10/2022** SeqNo: **3216147** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

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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#: **2208423**
22-Aug-22

Client: ENSOLUM
Project: 20 1 Bruce R Sullivan 2

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90188** RunNo: **90188**
Prep Date: Analysis Date: **8/10/2022** SeqNo: **3216147** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		115	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.3	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.1		10.00		91.1	70	130			

Qualifiers:

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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

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: 2208423 | RcptNo: 1

Received By: **Tracy Casarrubias** 8/6/2022 10:30:00 AM

Completed By: **Tracy Casarrubias** 8/6/2022 2:01:24 PM

Reviewed By: JR 8/8/22

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: KPA 8.08.22

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	5.5	Good	Yes			
2	2.7	Good	Yes			

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: 2D-1 | Bruce R Sullivan #2

Project #: see notes

Project Manager: ksummers

Sampler: RDeechilly
On Ice: ☑ Yes ☐ No
# of Coolers: 2
Cooler Temp(including CF): 1.) 5.3 +0.2 = 5.5 (°C)
2.) 2.5 +0.2 = 2.7 °C

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2208423
8/5/22	910	W	MW-1R	various	various	001
8/5/22	1000	W	MW-2	various	various	002
8/5/22	1040	W	MW-3	various	various	003
8/5/22	1115	W	MW-4	various	various	004
8/5/22	1155	W	MW-5	various	various	005

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_3, NO_2, PO_4, SO_4	8260 (VOA) BTEX	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
							X			X
							X			X
							X			X
							X			X
							X			X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8/5/22	1330				8/5/22	1330
8/5/22	1747			courier	8/6/22	10:30

Remarks: PM - Tom Long (EPROD)
NonAFE - N54659
Pay Key - RB21200

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 12, 2023

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

RE: Bruce R Sullivan 2 OrderNo.: 2304270

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/6/2023 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 **2304270**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-5
Project: Bruce R Sullivan 2
Collection Date: 4/5/2023 11:05:00 AM
Lab ID: 2304270-001 **Matrix:** AQUEOUS **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Sulfate	4400	50	*	mg/L	100	4/6/2023 3:31:42 PM	R95853
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **RBC**	
Total Dissolved Solids	6650	50.0	*	mg/L	1	4/11/2023 3:36:00 PM	74217

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

Qualifiers:

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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

Analytical Report
Lab Order **2304270**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-4
Project: Bruce R Sullivan 2
Collection Date: 4/5/2023 11:40:00 AM
Lab ID: 2304270-002 **Matrix:** AQUEOUS **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Sulfate	680	50	*	mg/L	100	4/6/2023 3:57:25 PM	R95853
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **RBC**	
Total Dissolved Solids	1210	50.0	*	mg/L	1	4/11/2023 3:36:00 PM	74217

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

Qualifiers:

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

Analytical Report
Lab Order **2304270**
Date Reported: **4/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: MW-1R
Project: Bruce R Sullivan 2
Collection Date: 4/5/2023 12:20:00 PM
Lab ID: 2304270-003 **Matrix:** AQUEOUS **Received Date:** 4/6/2023 6:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Sulfate	1900	50	*	mg/L	100	4/6/2023 4:48:53 PM	R95853
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **RBC**	
Total Dissolved Solids	3210	100	*D	mg/L	1	4/11/2023 3:36:00 PM	74217

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#: **2304270**

12-Apr-23

Client: ENSOLUM

Project: Bruce R Sullivan 2

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R95853**	RunNo: **95853**							
Prep Date:	Analysis Date: **4/6/2023**	SeqNo: **3470030**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R95853**	RunNo: **95853**							
Prep Date:	Analysis Date: **4/6/2023**	SeqNo: **3470031**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.3	0.50	10.00	0	93.0	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 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#: **2304270**

12-Apr-23

Client: ENSOLUM

Project: Bruce R Sullivan 2

Sample ID: **MB-74217**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **74217**	RunNo: **95921**
Prep Date: **4/10/2023**	Analysis Date: **4/11/2023**	SeqNo: **3473716** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50.0								

Sample ID: **LCS-74217**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **74217**	RunNo: **95921**
Prep Date: **4/10/2023**	Analysis Date: **4/11/2023**	SeqNo: **3473717** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	984	50.0	1000	0	98.4	80	120			

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: 2304270 | RcptNo: 1

Received By: Tracy Casarrubias 4/6/2023 6:15:00 AM

Completed By: Tracy Casarrubias 4/6/2023 8:40:08 AM

Reviewed By: JN 4/6/23

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: _____ 4/6/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: Phone number missing on COC- TMC 4/6/23

16. Additional remarks:

17. **Cooler Information**

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

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: Bruce R Sullivan #2

Project #:

Project Manager: K. Summers

Sampler:

On Ice: ☒ Yes ☐ No morty

# of Coolers: 1

Cooler Temp (including CF): 2.0 -0.1 = 1.9 (°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. 2304270	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)	TDS
4/5/23	11:05	W	MW-5	1 500mL jar	Cool	001							X				X
4/5/23	11:40	W	MW-4	↓	↓	002							X				X
4/5/23	12:20	W	MW-1R	↓	↓	003							X				X

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
4/5/23	1438				4/5/23	1438
4/5/23	1806			courier	4/6/23	10:15

Remarks: PM: Tom Long
No. AFE: N54659
Pay key: RB21200

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.

State of New Mexico
Energy, Minerals and Natural Resources Department

Thomas Long
Enterprise Products Company
615 Reilly Ave.
Farmington, NM 87401

August 15, 2024

RE: Approval for Request for Variance and Abatement Completion Report at the 2D-1 Well Tie/Bruce R Sullivan #2, Incident ID NAPP2121054964

Mr. Long,

The Oil Conservation Division (OCD) has received a request for variance and an abatement completion report prepared on behalf of Enterprise Field Services, LLC by Ensolum, LLC. The NMOCD has reviewed both document submissions and determined the request for variance and closure request to be satisfactory for approval.

The available information indicates Enterprise has met the exemption clause within Paragraph 7 of Subsection A of 19.15.30.12 paragraph A(7) NMAC which in part states, "or in a manner that will likely result in compliance with the standards and requirements set forth in 19.15.30.9 NMAC within one (1) year after notice is required to be given pursuant to 19.15.29.9 NMAC provided that the division does not object to the abatement action."

OCD approved the abatement action via excavation of the impacted vadose zone soils at the source of the release. Enterprise had provided an initial Form C-141 within the allowable time frame (15 days) from the date of discovery. All previous laboratory results from the five (5) test wells had either no analytical detection or were substantially below the New Mexico Water Quality Control Commission's allowable concentrations for the constituent of concern, namely benzene.

Due to the existing conditions stated above, the variance request for an alternative lesser number of samples to the eight (8) consecutive sampling requirements within Subsection D of 19.15.30.9 NMAC to meet the applicable abatement standards in Subsections A, B and C of 19.15.30.9 NMAC is approved.

If you have any questions, please contact Mike Buchanan of the Environmental Incident Group at (505) 490-0798 or by email at *michael.buchanan*@emnrd.nm.gov.

Respectfully,

RosaM Romero

Rosa Romero

Environmental Bureau Chief
RR/mb

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 208952

CONDITIONS

Operator:	OGRID:
Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	241602
	Action Number: 208952
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Abatement completion under part 30 is approved with letter of approval attached to document. This incident is closed.	8/16/2024