REVIEWED
By Mike Buchanan at 2:13 pm, Apr 05, 2024

ENSOLUM

2023 GROUNDWATER MONITORING REPORT

2023 Groundwater Monitoring Report for **Chaco Plant 3 Phase Separator: Content Satisfactory**
1. Continue to conduct semi-annual groundwater sampling for analysis.
2. Submit the 2024 Groundwater Monitoring Report by April 1, 2025.
3. Establish if monitored natural attenuation is a viable options for abatement and propose recommendation to NMOCD.
4. If a stage 2 abatement plan is in place, a modification to the abatement plan to incorporate a change in remediation/ abatement of groundwater contaminants will need to be implemented and approved by OCD.

Property:

Chaco Plant 3 Phase Separator (7/22/20)
Unit Letter N, S16 T26N R12W
San Juan County, New Mexico

New Mexico EMNRD OCD Incident ID No. NRM2021235744

January 9, 2024

Ensolum Project No. 05A1226115

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

This report describes the 2023 groundwater monitoring activities conducted at the Chaco Plant 3 Phase Separator (7/22/20) site, referred to hereinafter as the "Site".

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Chaco Plant 3 Phase Separator (7/22/20) (Site)
NM EMNRD OCD Incident ID No.	NRM2021235744
Location:	36.481637° North, 108.120470° West Unit Letter N, Section 16, Township 26 North, Range 12 West San Juan County, New Mexico
Property:	Enterprise
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On July 22, 2020, Enterprise personnel identified a release of produced water from a faulty valve on the three-phase separator. A flow path extended northwest from the release point. Excavation activities were performed at the Site during July 2020. Following the completion of excavation activities and off-site disposal of the removed hydrocarbon-affected soils, confirmation soil samples were collected from the excavation and delineation soil samples were collected from soil borings by Ensolum, LLC (Ensolum). Analytical results indicated constituent of concern (COC) concentrations exceeding the NM Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria for soils. Soil exhibiting COC exceedances was identified adjacent to the structural foundations. Additionally, potentially historic impact was identified in hand auger borings located over 10 feet outside the flow path. Following discussions with the NM EMNRD OCD, the excavation was backfilled with unaffected soils. During March 2021, a temporary monitoring was installed at the Site inside the former excavation footprint. The groundwater analytical results indicated COC concentrations above the Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs) (*Interim Site Characterization and Remediation Report*, Ensolum, November 18, 2021).

During May 2021, four soil borings were advanced on-Site by Ensolum. Subsequent to advancement, the soil borings were completed as 2-inch diameter groundwater monitoring wells (EW-2 through EW-4) and the temporary well was completed as a permanent monitoring well (EW-1). Laboratory analytical results for soil samples collected from the borings did not indicate concentrations of COCs above the NM EMNRD OCD closure criteria. However, COCs were confirmed in groundwater above the WQCC GQSs (*Interim Site Characterization and Remediation Report*, Ensolum, November 18, 2021).

Ensolum implemented groundwater monitoring during February 2022 and September 2022. Laboratory analytical results for the groundwater samples collected from monitoring well EW-1 indicated benzene concentrations above the WQCC GQS. The groundwater samples collected from the remaining monitoring wells during the two 2022 sampling events did not exhibit COC concentrations above the applicable WQCC GQS (*2022 Groundwater Monitoring Report*, Ensolum, February 13, 2023).

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 19.15.29 NM Administrative Code (NMAC), which establishes investigation and abatement action requirements for sites that are

subject to reporting and/or corrective action. Additionally, the NM EMNRD OCD utilizes the NM WQCC GQS (20.6.2 NMAC *Ground and Surface Water Protection*) to evaluate groundwater conditions.

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

1.2 Project Objective

The objective of the groundwater monitoring events was to further evaluate the concentrations of COCs in groundwater at the Site.

2.0 GROUNDWATER MONITORING

Ensolum conducted groundwater sampling events during February 2023 and August 2023. The groundwater sampling program consisted of the collection of one groundwater sample from each of the monitoring wells at the Site on a semi-annual basis. Monitoring well EW-1 was not sampled during the February 2023 sampling event, due to ice covering the subgrade well cap. The NM EMNRD OCD was notified of the sampling events although no representative was present during the sampling activities. Regulatory correspondence is provided in **Appendix B**.

Ensolum's groundwater sampling program consisted of the following:

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

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

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

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

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

2.1 Groundwater Laboratory Analytical Methods

The groundwater samples collected from the monitoring wells during the two sampling events were analyzed for volatile organic compounds (VOCs) utilizing United States Environmental Protection Agency (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 (Feb/Aug)	Method
BTEX	Groundwater	3/4	SW-846 8260

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

2.2 Groundwater Flow Direction

The groundwater flow direction at the Site generally trends toward the northwest. The calculated gradient during the 2023 monitoring events averages 0.002 feet per foot (ft/ft) across the Site. Groundwater elevation data collected during the 2023 gauging events are presented in **Table 2** (**Appendix C**). Groundwater gradient maps for the 2023 gauging events are included as **Figure 4A** and **Figure 4B** (**Appendix A**).

2.3 Groundwater Data Evaluation

Ensolum compared the laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the groundwater samples collected from monitoring wells during the 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** of **Appendix C**. The WQCC Standard Exceedance maps are provided as **Figure 5A** and **Figure 5B** 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**).

February 2023
Monitoring Well EW-1 was not sampled during February due to ice covering the subgrade well.

- The February 2023 analytical result for the monitoring well samples do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- The February 2023 analytical results for the 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 February 2023 analytical results for the monitoring well samples do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 700 µg/L.

- The February 2023 analytical results for the monitoring well samples do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 620 µg/L.

- The February 2023 analytical results for the monitoring well samples do not indicate naphthalene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 30 µg/L.

- The February 2023 analytical result for monitoring well EW-4 indicates a chloroform concentration of 120 µg/L, which exceeds the WQCC HHS of 100 µg/L. The analytical results for the remaining monitoring well samples do not indicate chloroform concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 100 µg/L.

- The February 2023 analytical result for monitoring well EW-4 indicates a carbon tetrachloride concentration of 2.4 µg/L, which is below the WQCC HHS of 5 µg/L. The analytical results for the remaining monitoring well samples do not indicate carbon tetrachloride concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- The February 2023 analytical result for monitoring well EW-4 indicates a tetrachloroethene (PCE) concentration of 2.6 µg/L, which is below the WQCC HHS of 5 µg/L. The analytical results for the remaining monitoring well samples do not indicate PCE concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- The February 2023 analytical result for monitoring well EW-4 indicates a trichloroethene (TCE) concentration of 1.2 µg/L, which is below the WQCC HHS of 5 µg/L. The analytical results for the remaining monitoring well samples do not indicate TCE concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- No data qualifier flags are associated with the February 2023 analytical results.

August 2023

- The August 2023 analytical result for sample EW-1 indicates a benzene concentration of 22 µg/L, which exceeds the WQCC HHS of 5 µg/L. The analytical results for the remaining monitoring well samples do not indicate benzene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- The August 2023 analytical results for the 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 August 2023 analytical result for sample EW-1 indicates an ethylbenzene concentration of 23 µg/L, which is below the WQCC HHS of 700 µg/L. The analytical results for the remaining monitoring well samples do not indicate ethylbenzene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 700 µg/L.

- The August 2023 analytical results for the monitoring well samples do not indicate total xylene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 620 µg/L.

- The August 2023 analytical results for the monitoring well samples do not indicate naphthalene concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 30 µg/L.

- The August 2023 analytical result for monitoring well EW-4 indicates a chloroform concentration of 150 µg/L, which exceeds the WQCC HHS of 100 µg/L. The analytical results for the remaining monitoring well samples do not indicate chloroform concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 100 µg/L.

- The August 2023 analytical result for monitoring well EW-4 indicates a carbon tetrachloride concentration of 3.1 µg/L, which is below the WQCC HHS of 5 µg/L. The analytical results for the remaining monitoring well samples do not indicate carbon tetrachloride concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- The August 2023 analytical result for monitoring well EW-4 indicates a PCE concentration of 3.3 µg/L, which is below the WQCC HHS of 5 µg/L. The analytical results for the remaining monitoring well samples do not indicate PCE concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- The August 2023 analytical result for monitoring well EW-4 indicates a TCE concentration of 1.3 µg/L, which is below the WQCC HHS of 5 µg/L. The analytical results for the remaining monitoring well samples do not indicate TCE concentrations above the laboratory PQLs/RLs, which are below the WQCC HHS of 5 µg/L.

- No data qualifier flags are associated with the August 2023 analytical results.

3.0 FINDINGS

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

- The groundwater flow direction at the Site is generally towards the northwest, with a gradient of 0.002 ft/ft across the Site.

- Benzene was reported at concentrations exceeding the NM WQCC GQS of 5 µg/L in the groundwater sample collected from monitoring well EW-1 during the August 2023 sampling event. In addition, chloroform was reported at concentrations exceeding the NM WQCC GQS of 100 µg/L in groundwater samples collected from monitoring well EW-4 during the February 2023 and August 2023 sampling events. The groundwater samples collected from the remaining monitoring wells during the two 2023 sampling events did not exhibit COC concentrations above the applicable WQCC GQSs.

- Aside from the increased chloroform and trace constituent concentrations at monitoring well EW-4, which appear to have increased during 2023, the results from 2023 generally continue to demonstrate relatively stable COC concentrations.

4.0 RECOMMENDATIONS

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

- Report the groundwater monitoring data to the NM EMNRD OCD.

- Continue semi-annual groundwater monitoring at the Site to monitor COCs in groundwater to evaluate the natural attenuation potential.

5.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

5.1 Standard of Care

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

5.2 Limitations

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

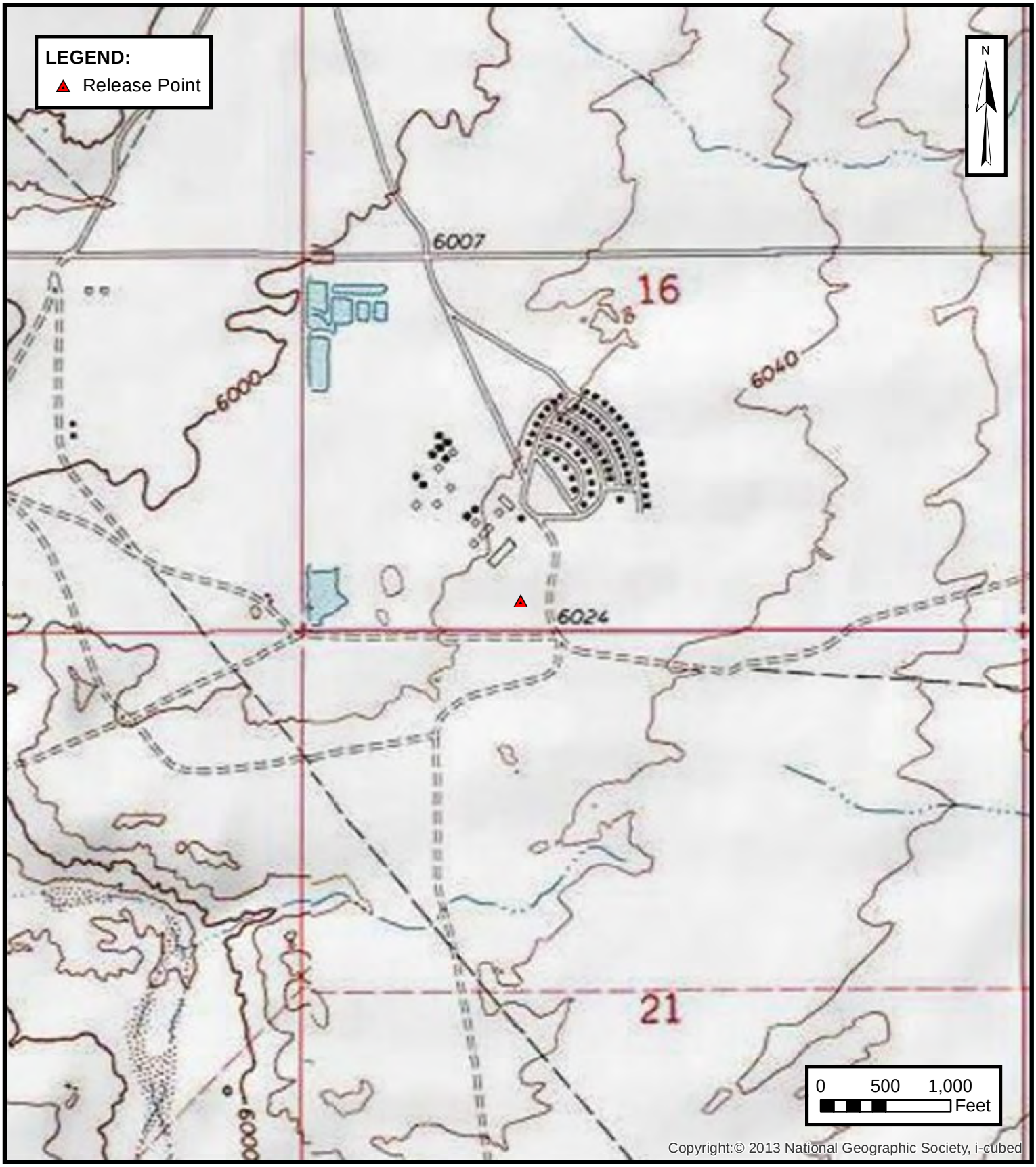
5.3 Reliance

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

ENSOLUM

APPENDIX A

Figures



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
CHACO PLANT 3 PHASE SEPARATOR (7/22/20)
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.481637° N, 108.120470° W

PROJECT NUMBER: 05A1226115

FIGURE
1

ENSOLUM
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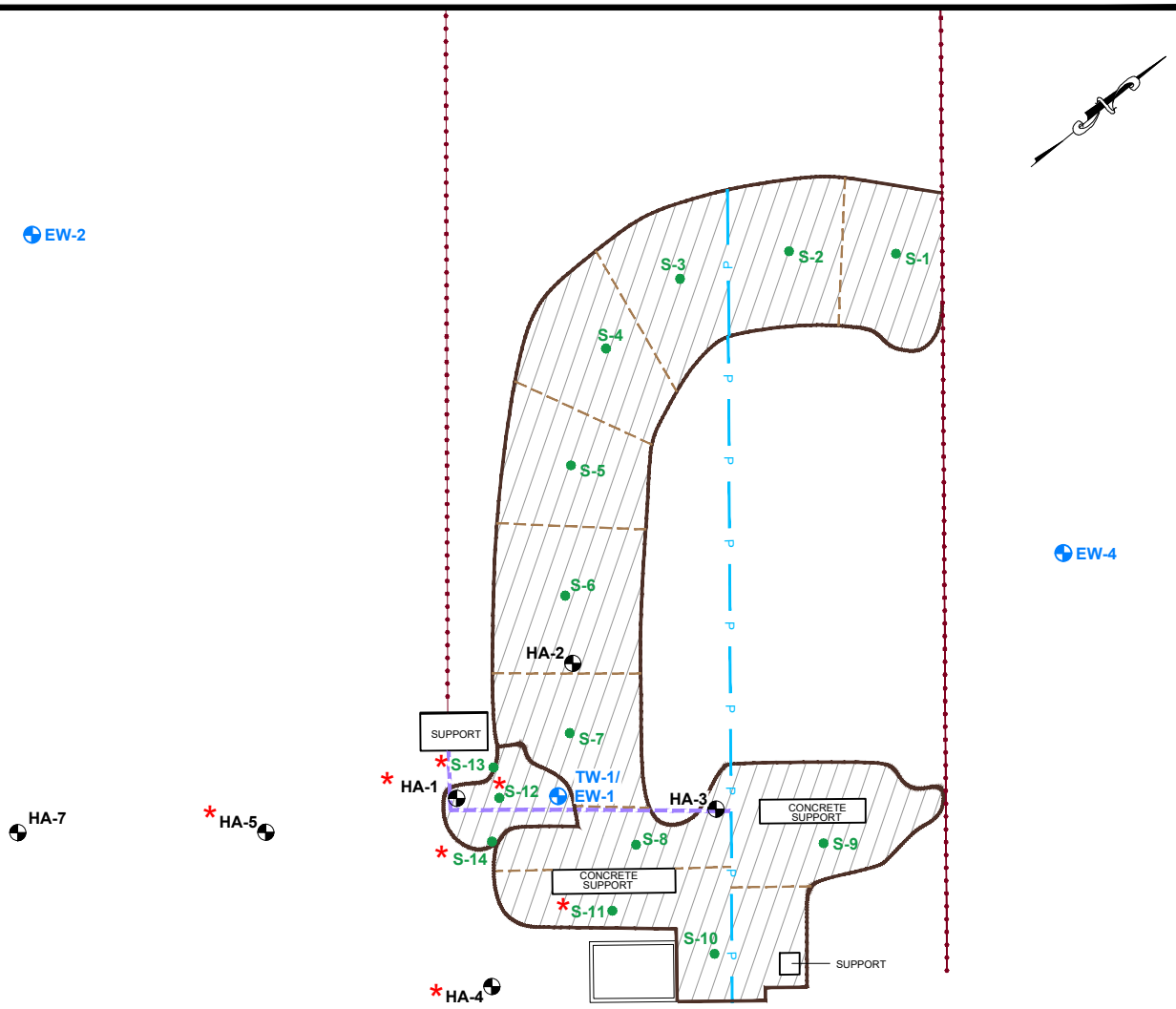
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
CHACO PLANT 3 PHASE SEPARATOR (7/22/20)
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.481637° N, 108.120470° W

PROJECT NUMBER: 05A1226115

FIGURE
2



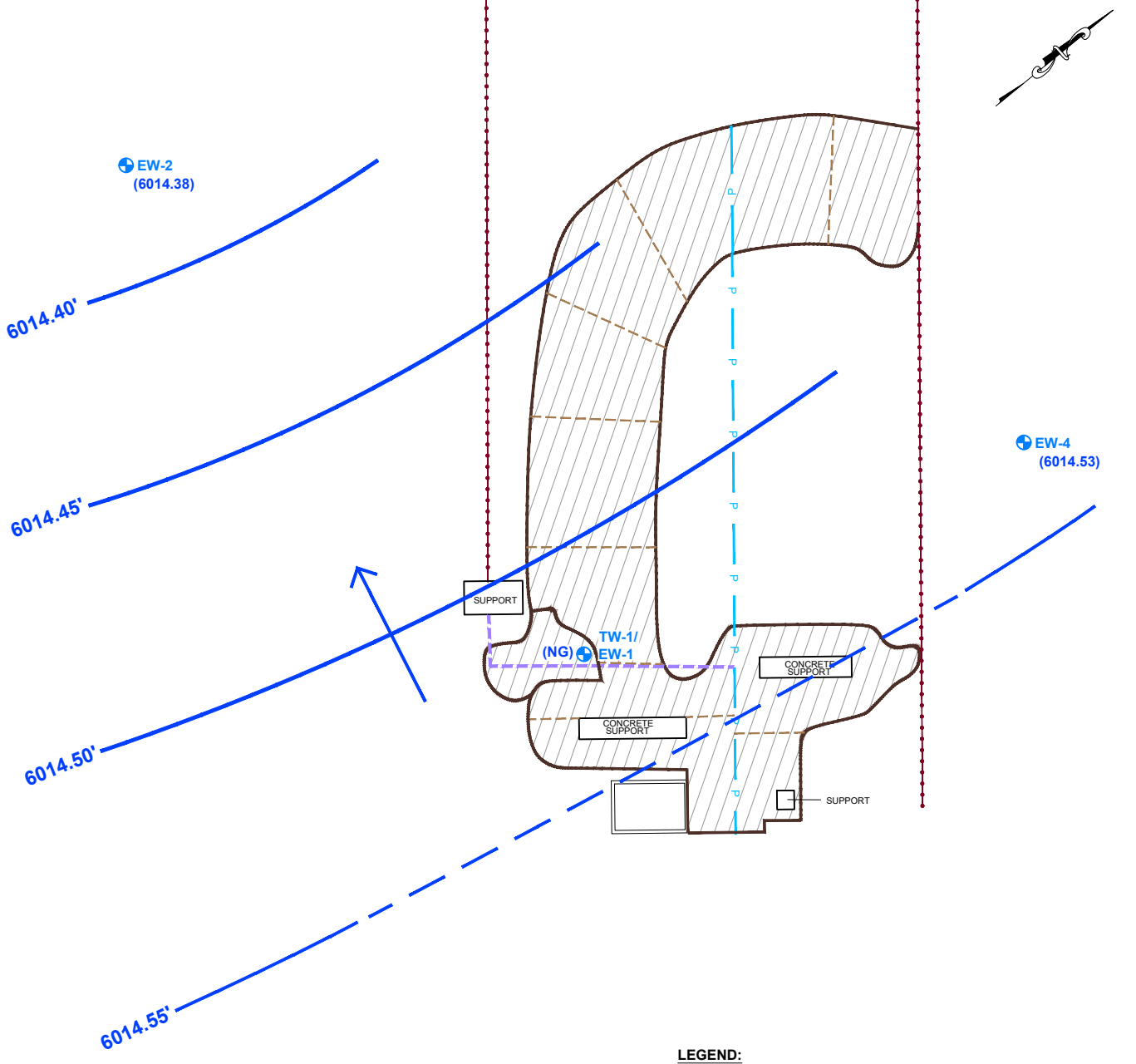
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SITE MAP

CHACO PLANT 3 PHASE SEPARATOR (7/22/20)
UNIT LETTER N, S16 T26N R12W
SAN JUAN COUNTY, NEW MEXICO
36.481637° North, 108.120470 West°

PROJECT NUMBER: 05A1226115

FIGURE
3



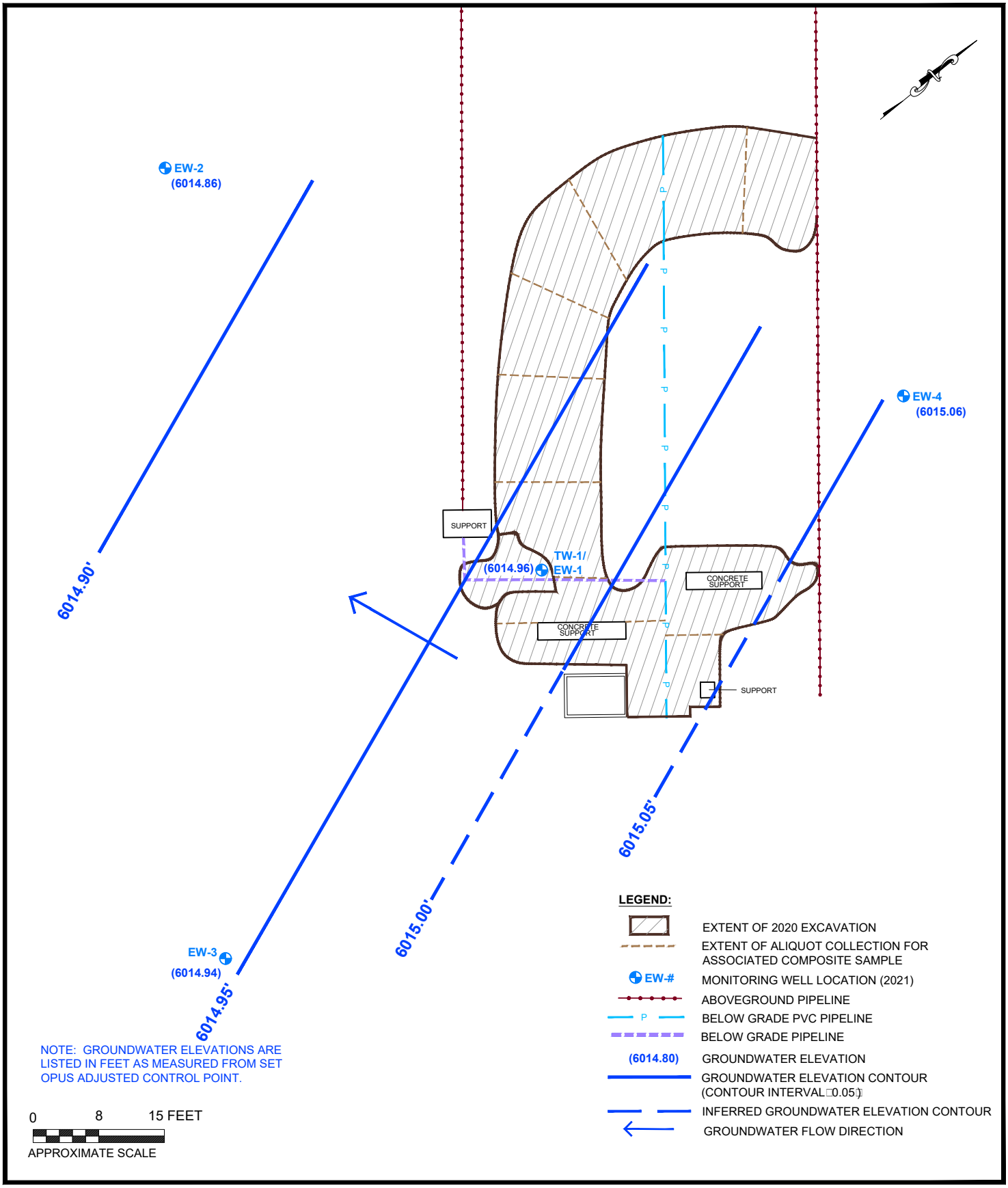
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

GROUNDWATER GRADIENT MAP (FEBRUARY 2023)

CHACO PLANT 3 PHASE SEPARATOR (7/22/20)
UNIT LETTER N, S16 T26N R12W
SAN JUAN COUNTY, NEW MEXICO
36.481637 °North, 108.120470 °West

PROJECT NUMBER: 05A1226115

FIGURE
4A



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

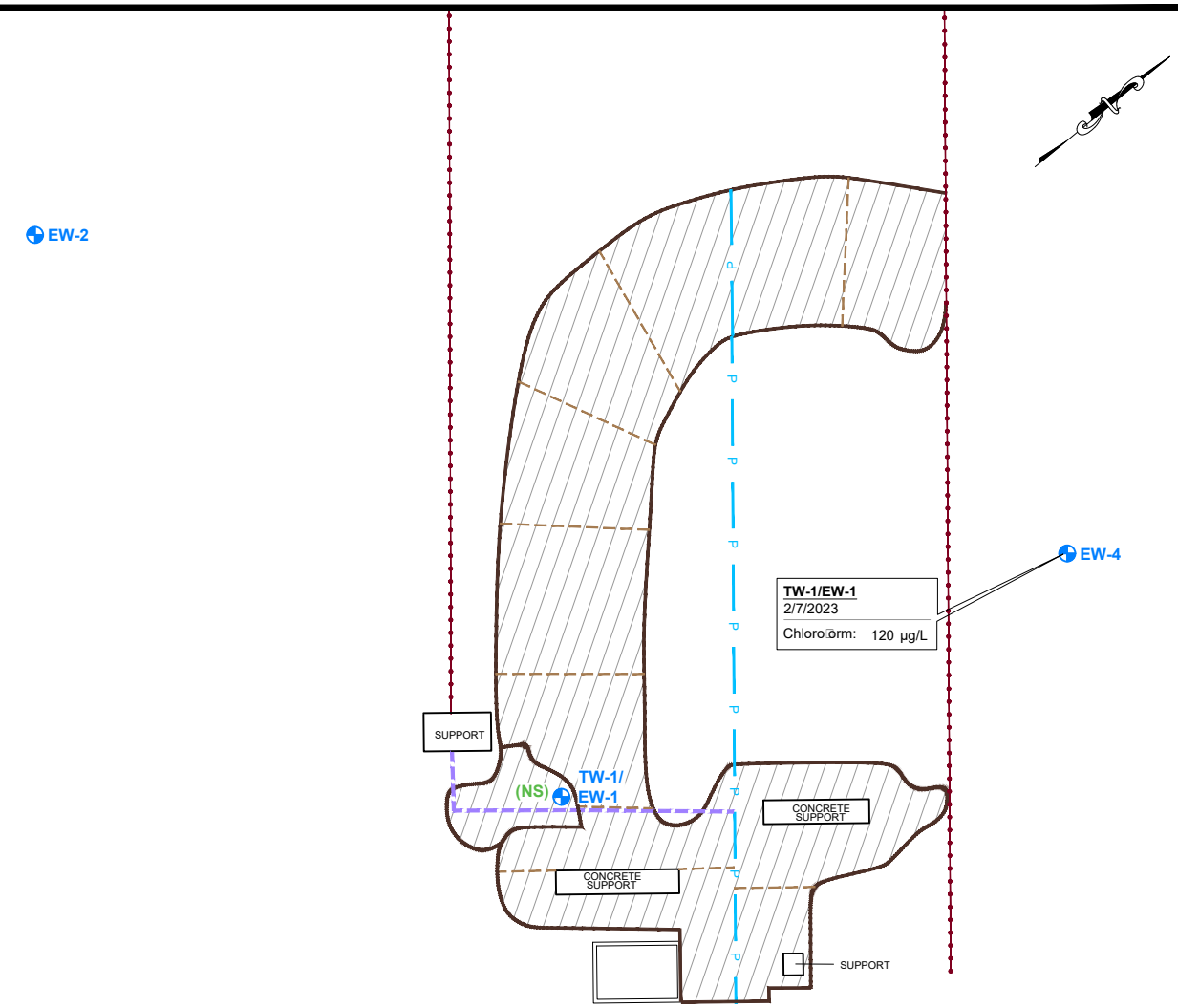
GROUNDWATER GRADIENT MAP (AUGUST 2023)

CHACO PLANT 3 PHASE SEPARATOR (7/22/20)
UNIT LETTER N, S16 T26N R12W
SAN JUAN COUNTY, NEW MEXICO
36.481637 °North, 108.120470 West°

PROJECT NUMBER: 05A1226115

FIGURE

4B



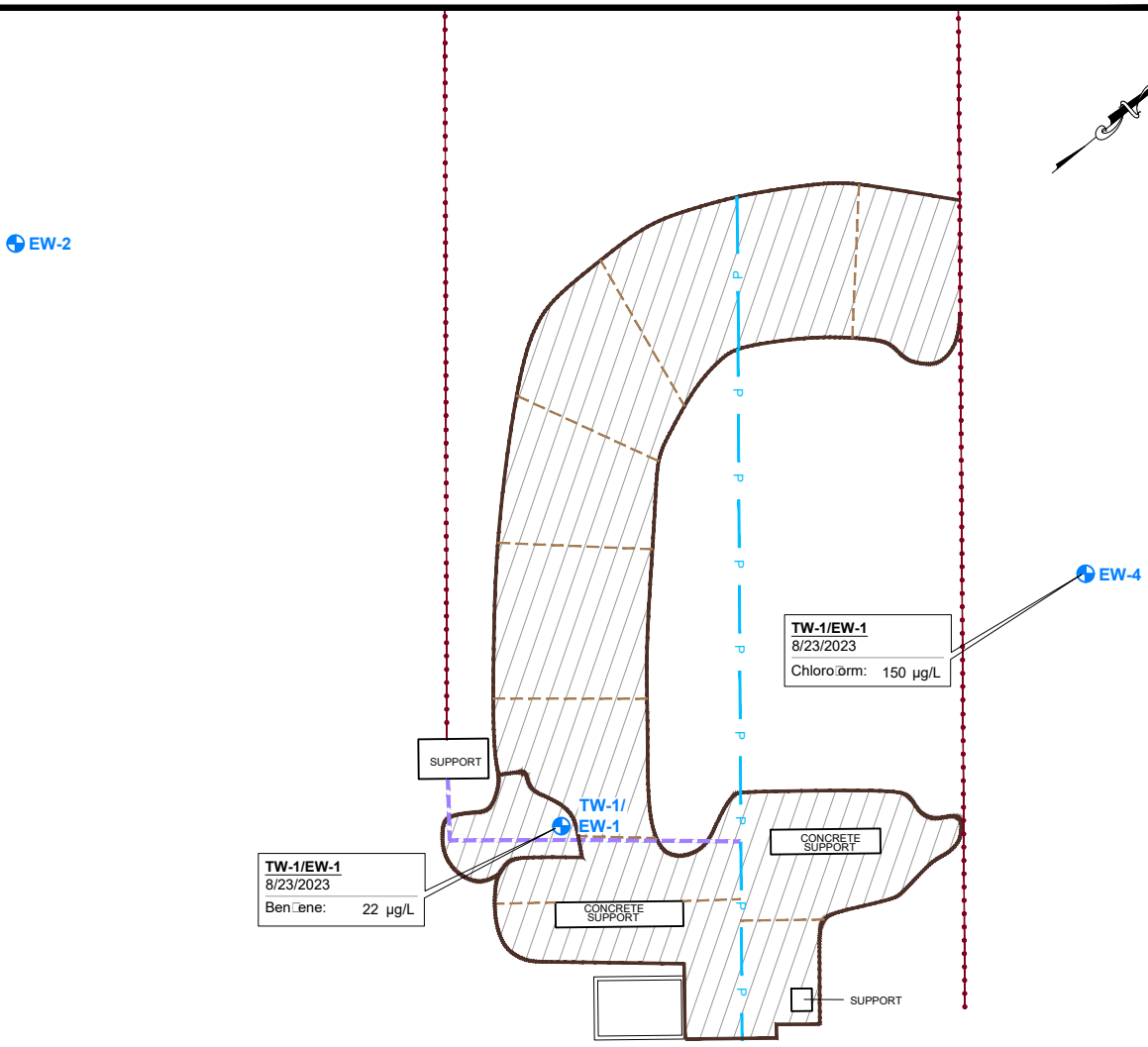
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

WQCC STANDARD EXCEEDANCES (FEBRUARY 2023)

CHACO PLANT 3 PHASE SEPARATOR (7/22/20)
UNIT LETTER N, S16 T26N R12W
SAN JUAN COUNTY, NEW MEXICO
36.481637° North, 108.120470 West°

PROJECT NUMBER: 05A1226115

FIGURE
5A



LEGEND:

- EXTENT OF 2020 EXCAVATION
- EXTENT OF ALIQUOT COLLECTION FOR ASSOCIATED COMPOSITE SAMPLE
- EW-# MONITORING WELL LOCATION (2021)
- ABOVEGROUND PIPELINE
- P BELOW GRADE PVC PIPELINE
- BELOW GRADE PIPELINE

0 8 15 FEET

APPROXIMATE SCALE

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

WQCC STANDARD EXCEEDANCES (AUGUST 2023)

CHACO PLANT 3 PHASE SEPARATOR (7/22/20)
UNIT LETTER N, S16 T26N R12W
SAN JUAN COUNTY, NEW MEXICO
36.481637° North, 108.120470 West°

PROJECT NUMBER: 05A1226115

FIGURE

5B

ENSOLUM

APPENDIX B

Regulatory Correspondence

From: Kyle Summers
To: Ranee Deechilly
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264
Date: Tuesday, August 22, 2023 11:57:33 AM
Attachments: Outlook-1oxhtynp.png
image004.png
image005.png
image006.png

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Tuesday, August 22, 2023 10:16 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: Re: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[**EXTERNAL EMAIL**]

Tom,

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

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

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

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

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

Thanks again

Regards,

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, August 21, 2023 9:58 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

The email is a notification and a variance request since we will be onsite sampling for the Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to sample the groundwater monitoring wells on Wednesday, August 23, 2023, beginning at 0800 at the Chaco Plant Produced Water Spill site. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company

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

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Tuesday, February 7, 2023 10:28 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]

Tom,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12C (1a) &/or 19.15.30.14B NMAC is approved.

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

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

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

Thanks again

Regards,

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, February 7, 2023 7:36 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

The email is a notification and a variance request since we will be onsite sampling for the Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like sample the groundwater monitoring well today at the Chaco Plant Produced Water Spill site. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

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

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, January 25, 2023 12:25 PM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]
Tom,

Thank you for the correspondence and update. Your request for a time extension is approved. The new closure deadline will be May 26, 2023. This has been updated in the OCD online incident page.

OCD will evaluate the data given and will provide feedback in the near future into how to proceed.

Regards,

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, January 24, 2023 7:55 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

Please find the attached rising head test data from last week. The results are pretty much the same as the last rising head test. Please let me know your thoughts on how to proceed. The email is also a time extension request for the Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264 for continued groundwater delineation and remediation activities. The previous time extension was approved until January 26, 2023 on July 28, 2022. Enterprise has completed aquifer characterization tests and another round groundwater sampling in recent weeks. We are currently waiting of lab results from the last sampling event. Enterprise requests a 120 day time extension to complete additional groundwater delineation and reporting activities. Please acknowledge acceptance of the time extension request. 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] FW: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling
Date: Friday, February 3, 2023 7:20:48 AM
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: Friday, February 3, 2023 7:19 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: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

[**EXTERNAL EMAIL**]

Nelson,

This sampling event has been postponed until Tuesday, February 7, 2022. If you have any questions, please call or email.

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

Enterprise Products

From: Long, Thomas
Sent: Tuesday, January 31, 2023 12:25 PM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] FW: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

Nelson,

This email is a notification that Enterprise will be groundwater sampling at the Chaco Plant Three Phase Separator release site on Monday, February 6, 2023. 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: Thursday, September 8, 2022 10:35 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] FW: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

[Use caution with links/attachments]
Tom,

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

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

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

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

Thanks again

Regards,

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

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: Thursday, September 8, 2022 7:59 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] FW: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

Nelson,

This email is a notification that Enterprise will be groundwater sampling at the Chaco Plant Three Phase Separator release site on Monday, September 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: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, February 11, 2022 8:36 AM
To: Long, Thomas <tjlong@eprod.com>

Subject: RE: [EXTERNAL] FW: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

[Use caution with links/attachments]

Tom,

Thanks for the notification. Have a good day and be safe.

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.: 7:00–11:30 am & 1:00–4:00 pm Mon.–Thur.
7:00 am-12:00 pm & 1:00-4:00 Fri.

From: Long, Thomas <tjlong@eprod.com>
Sent: Friday, February 11, 2022 8:34 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] FW: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

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

Nelson,

This email is a notification that Enterprise will be groundwater sampling at the Chaco Plant Three Phase Separator release site on Tuesday, February 15, 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: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Wednesday, August 4, 2021 8:44 AM
To: Kyle Summers <ksummers@ensolum.com>

Cc: Long, Thomas <tjlong@eprod.com>; Stone, Brian <bmstone@eprod.com>; Ranee Deechilly <rdeechilly@ensolum.com>
Subject: [EXTERNAL] RE: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

[Use caution with links/attachments]
Kyle,

Thanks for the update

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: Kyle Summers <ksummers@ensolum.com>
Sent: Wednesday, August 4, 2021 8:32 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: 'Long, Thomas' <tjlong@eprod.com>; Stone, Brian <bmstone@eprod.com>; Ranee Deechilly <rdeechilly@ensolum.com>
Subject: FW: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

Cory,
We were not able to enter the Chaco Plant today due to unscheduled maintenance. We are currently rescheduled for 8 AM on Friday, August 6, 2021.

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Kyle Summers
Sent: Monday, August 2, 2021 8:06 AM
To: Smith, Cory <cory.smith@state.nm.us>
Cc: 'Long, Thomas' <tjlong@eprod.com>; Stone, Brian <bmstone@eprod.com>; Ranee Deechilly <rdeechilly@ensolum.com>
Subject: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling

Mr. Smith,
Groundwater sampling at the Chaco Gas Plant Phase 3 Separator site is currently scheduled to begin

at 8 AM on Wednesday, August 4, 2021. I don't think I have heard back from you with regard to the analytical suite, if you have any input. Let me know if you have any questions.

Thanks,
Kyle Summers

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Kyle Summers
Sent: Friday, July 23, 2021 10:29 AM
To: 'cory.smith@state.nm.us' <cory.smith@state.nm.us>
Cc: 'Long, Thomas' <tjlong@eprod.com>; Ranee Deechilly <rdeechilly@ensolum.com>; Stone, Brian <bmstone@eprod.com>
Subject: Enterprise Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744 - Groundwater sampling analytical parameters

Cory, it isn't scheduled yet, but we are looking at groundwater sampling at Chaco next week if Operations can accommodate. I believe the initial source area well was sampled for 8260, cations/anions, pH, and TDS. Benzene and TDS exceeded standards.
Will you want that same analytical suite again?
In Tom's absence, I'll notify when/if I get a schedule.
Thanks,
Kyle

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

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

From: Kyle Summers
To: Ranee Deechilly
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264
Date: Tuesday, February 7, 2023 12:34:16 PM
Attachments: image004.png
image005.png
image006.png

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

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

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Tuesday, February 7, 2023 10:28 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[**EXTERNAL EMAIL**]

Tom,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12C (1a) &/or 19.15.30.14B NMAC is approved.

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

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

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

Thanks again

Regards,

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, February 7, 2023 7:36 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

The email is a notification and a variance request since we will be onsite sampling for the Chaco Plant Phase 3 Separator - Incident ID: NRM2021235744. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like sample the groundwater monitoring well today at the Chaco Plant Produced Water Spill site. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

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

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, January 25, 2023 12:25 PM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]

Tom,

Thank you for the correspondence and update. Your request for a time extension is approved. The new closure deadline will be May 26, 2023. This has been updated in the OCD online incident page.

OCD will evaluate the data given and will provide feedback in the near future into how to proceed.

Regards,

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, January 24, 2023 7:55 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

Please find the attached rising head test data from last week. The results are pretty much the same as the last rising head test. Please let me know your thoughts on how to proceed. The email is also a time extension request for the Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264 for continued groundwater delineation and remediation activities. The previous time extension was approved until January 26, 2023 on July 28, 2022. Enterprise has completed aquifer characterization tests and another round groundwater sampling in recent weeks. We are currently waiting of lab results from the last sampling event. Enterprise requests a 120 day time extension to complete additional groundwater delineation and reporting activities. Please acknowledge acceptance of the time extension request. 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, January 16, 2023 9:08 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; 'Kyle Summers' <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

This email is a notification that Enterprise will be groundwater sampling at the Chaco Plant Produced Water Spill release site on Thursday, January 19, 2023. 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: Thursday, September 8, 2022 8:03 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

This email is a notification that Enterprise will be groundwater sampling at the Chaco Plant Produced Water Spill release site on Tuesday, February 15, 2022. Sampling activities are anticipated to take one day. After sampling we will attempt to conduct a bail down test on the well. 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: Thursday, July 28, 2022 7:41 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]
Tom,

Thank you for your communication with OCD.

Your time extension request is approved. The remediation due date will be updated to January 25, 2023 within the OCD incident page for this release.

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, sample event notifications, time extension and variance requests.

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

Thank you 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: Wednesday, July 27, 2022 9:10 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

The email is a time extension request for the Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264 for continued groundwater delineation and remediation activities. The initial time extension was approved until July 29, 2022 on May 5, 2022. Enterprise has currently and completed soil remediation activities and completed initial groundwater delineation activities. Enterprise will be submitting an interim report documenting the above mentioned activities in the near future. The draft report has been reviewed and will be finalized shortly. Enterprise requests a 180 day time extension to complete additional groundwater delineation and reporting activities. Please acknowledge acceptance of the time extension request. If you have any questions, please call or email.

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

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Tuesday, July 5, 2022 11:17 AM

To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]
Tom,

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

Please keep a copy of this communication for inclusion within the appropriate reporting documentation. If you have any questions, please contact me via email at your convenience.

Thanks again

Regards,

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, July 5, 2022 9:20 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

This email is a notification that Enterprise will be conducting groundwater sampling and monitoring activities at the Chaco Plant Produced Water Spill on Thursday July 7, 2022. One monitoring well will be 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: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, June 24, 2022 8:47 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Tami Knight <TKnight@envirotech-inc.com>; Brittany Hall <bhall@envirotech-inc.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

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

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

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

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

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

Thanks again

Regards,

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Friday, June 24, 2022 7:56 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Tami Knight <TKnight@envirotech-inc.com>; Brittany Hall <bhall@envirotech-inc.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

This email is a notification that Enterprise will install soil borings and groundwater monitoring wells at the Chaco Plant Produced Water Spill site beginning Monday, June 27, 2022. Drilling activities are anticipated to take two days. Soil samples will be collected as each soil boring/monitoring well is advanced as per the previously submitted remediation plan. 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: Thursday, May 5, 2022 10:55 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; Tami Knight <TKnight@envirotech-inc.com>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]
Tom,

In lieu of Enterprise's pro-active approach and submittal of the appropriate site assessment documentation regarding this incident, your request for a 90 day extension beyond the 04/26/2022 remediation due date is approved. In addition, the initial proposed remedial action is verbally approved. Enterprise must submit the finalized remediation plan through the C-141 portal as soon as practicable (30 days maximum from this correspondence) with the necessary documentation (e.g.

safety data sheet for H_2o_2, application technique, etc.) to support the future activities.

The updated remediation due date is now 07/29/2022.

According to our records, this is an initial time extension request.

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

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

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

Thanks again

Regards,

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Thursday, May 5, 2022 8:22 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Tami Knight <TKnight@envirotech-inc.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

This email is a time extension request of 90 days to continue the delineation and remediation activities associated with the Chaco Plant Produced Water release that occurred on January 26, 2022. To date, Enterprise has been remediating the release by contaminant mass removal. The current excavation is approximately 25 feet long by 20 feet wide by 25 feet deep. Approximately 500 cubic yards of hydrocarbon contaminated soil has been excavated and transported to a NMOCD approved landfarm facility for proper disposal. A majority of the release has been remediated to the NMOCD Tier I remediation standards. Two soil samples (CS-45 and CS-46) exhibit contaminant concentrations exceeding the NMOCD Tier I remediation standards. These soil samples were

collected from the capillary fringe/smear zone located approximately 22 to 25 feet below ground surface. Please see the attachment for analytical results and a map illustrating where soil samples exceed the Tier I remediation standards. Because contaminant concentrations exceeding Tier I standards only exist in the capillary fringe/smear zone with approximately 22 feet of clean overburden material, contaminant mass removal by excavating would not continue to be a practicable remediation method. Enterprise proposes an alternate remediation approach. Enterprise requests to apply a hydrogen peroxide solution to the excavation side walls and then backfill the excavation with clean fill material. Upon completion, Enterprise proposes to install soil borings and/or groundwater monitoring wells utilizing a hollow stem augur drilling rig in an effort to continue delineation and remediation activities. Please acknowledge acceptance of this time extension request and alternate remediation approach. If you have any questions, please call or email.

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

Enterprise Products

From: Long, Thomas
Sent: Wednesday, April 27, 2022 2:06 PM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; tknight@envirotech-inc.com; Tami Knight <TKnight@envirotech-inc.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis tomorrow April 28, 2022 at 3:00 p.m. Unfortunately, we were not ready to collect the samples today. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
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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, April 27, 2022 10:11 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; tknight@envirotech-inc.com; Tami Knight <TKnight@envirotech-inc.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]

Your variance to modify the sampling notification per 19.15.29.12D (1a) NMAC is approved. If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

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: Wednesday, April 27, 2022 7:43 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; tknight@envirotech-inc.com; Tami Knight <TKnight@envirotech-inc.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

Please find the attached site map and lab report for the Chaco Plant Produced Water Spill excavation. All sample results are below the NMOCD Tier I remediation standards. The sample identifications are for upper and lower intervals (example CS-30/CS-31) to meet the 200 square foot sampling requirement. We still have to clean out the bottom/base and sample it. We plan on doing that this afternoon and I am requesting another variance request for the required 48 hour sample notification, as that we would like to sample around 3:00 p.m. Enterprise will be collecting soil samples on the base every 200 square feet as per NMCOD regulation. If we do not sample the base this afternoon, it will be Friday afternoon and I will send a follow up notification. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

Thomas J. Long
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505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Thursday, April 21, 2022 10:58 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>; tknight@envirotech-inc.com
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[Use caution with links/attachments]

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

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposal and/or final closure reports.

Correspondence required to be included in reports may include, but not limited to, time extension requests, liner inspection notifications, sample event notifications, spill/release/fire notifications, and variance requests.

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: Thursday, April 21, 2022 9:48 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; tknight@envirotech-inc.com
Subject: FW: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

This email is a follow up to our phone conversation earlier. Enterprise requests a variance for the required 48 hour sample notification. Enterprise requests to sample the entire excavation to establish a baseline. Enterprise will be collecting soil samples every 200 square feet as per NMCOD regulation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

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From: Long, Thomas
Sent: Thursday, April 14, 2022 10:55 AM
To: 'Velez, Nelson, EMNRD' <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

Nelson,

I am sending notification today because tomorrow is a holiday for Enterprise. This email is a notification that Enterprise will be collecting soil samples for laboratory analysis at the Chaco Plant Produced Water Spill excavation Monday, April 18, 2022 at 3:00 p.m. If you have any questions, please call or email.

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tjlong@eprod.com

Enterprise Products

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Friday, April 8, 2022 7:39 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

[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 sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposal and/or final closure reports.

Correspondence required to be included in reports may include, but not limited to, time extension requests, liner inspection notifications, sample event notifications, spill/release/fire notifications, and variance requests.

Thanks again.

Regards

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

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

From: Long, Thomas <tjlong@eprod.com>
Sent: Friday, April 8, 2022 7:37 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] Chaco Plant Produced Water Spill; UL E Section 16 T26N R12W;36.484021, -108.11705; Incident #nAPP2202747264

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

Nelson,

This email is a notification that Enterprise will be collecting soil samples for laboratory analysis at the Chaco Plant Produced Water Spill excavation Monday, April 11, 2022 at 10:00 a.m. If you have any questions, please call or email.

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Enterprise Products

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

ENSOLUM

APPENDIX C

Tables

ENSOLUM

TABLE 1
Chaco Plant 3 Phase Separator (7/22/20)
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)	Chloroform (µg/L)	Carbon Tetrachloride (µg/L)	Tetrachloroethene (PCE) (µg/L)	Trichloroethene (TCE) (µg/L)	Bromodichloromethane[2] (µg/L)	Bromoform[1] (µg/L)	Chlorobenzene[1] (µg/L)	1,2,4-Trimethylbenzene[1,2] (µg/L)	1,3,5-Trimethylbenzene[1,2] (µg/L)	2-Chlorotoluene[1,2] (µg/L)	4-Chlorotoluene[1,2] (µg/L)	Dibromochloromethane[1] (µg/L)	Isopropylbenzene[1,2] (µg/L)	n-Propylbenzene[1,2] (µg/L)	sec-Butylbenzene[1,2] (µg/L)
New Mexico Water Quality Control Commmission Human Health Standards		**5**	**1,000**	**700**	**620**	**30**	**100**	**5**	**5**	**5**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Water Sample Collected from the Temporary Monitoring Well																					
TW-1/EW-1	3.24.21	**88**	<1.0	29	170	2.7	3.3	<1.0	<1.0	<1.0	1.6	<1.0	4.4	10	4.3	5.1	1.3	1.1	3.2	1.5	<1.0
Water Samples Collected from the Monitoring Wells																					
EW-1	8.06.21	**53**	<5.0	58	10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	9.3	9.1	<5.0	6.0	<5.0	<5.0	12	<5.0	<5.0
	2.22.22	**12**	<2.0	40	<3.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	7.8	16	<2.0	6.5	<2.0	<2.0	10	4.1	<2.0
	9.12.22	**11**	<1.0	18	1.7	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.6	5.9	<1.0	4.4	<1.0	<1.0	5.9	2.2	2.4
	2.7.23[A]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8.23.23	**22**	<1.0	23	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.6	<1.0	<1.0	4.3	<1.0	<1.0	8.5	2.7	3.0
EW-2	8.06.21	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2.22.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2.7.23	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8.23.23	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
EW-3	8.06.21	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2.22.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2.7.23	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8.23.23	<1.0	<1.0	<1.0	<1.5	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
EW-4	8.06.21	<5.0	<5.0	<5.0	<7.5	<10	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	2.22.22	<2.0	<2.0	<2.0	<3.0	<4.0	49	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	9.12.22	<1.0	<1.0	<1.0	<1.5	<2.0	18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2.7.23	<1.0	<1.0	<1.0	<1.5	<2.0	**120**	2.4	2.6	1.2	5.7	2.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	<1.0	<1.0	<1.0
	8.23.23	<1.0	<1.0	<1.0	<1.5	<2.0	**150**	3.1	3.3	1.3	5.1	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0

Notes:

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

[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] - Monitoring well EW-1 was not sampled due to ice covering the well head.

µg/L = microgram per liter

NE = Not Established

NS = Not Sampled

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

ENSOLUM

TABLE 2
Chaco Plant 3 Phase Separator (7/22/20)
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 (feet AMSL)
EW-1	8.6.21	ND	12.29	ND	20	10-20	6026.96	6014.67
	2.22.22	ND	12.45	ND				6014.51
	9.12.22	ND	12.20	ND				6014.76
	2.7.23[A]	NG	NG	NG				NG
	8.23.23	ND	12.00	ND				6014.96
EW-2	8.6.21	ND	12.27	ND	20	10-20	6026.78	6014.51
	2.22.22	ND	12.43	ND				6014.35
	9.12.22	ND	12.16	ND				6014.62
	2.7.23	ND	12.40	ND				6014.38
	8.23.23	ND	11.92	ND				6014.86
EW-3	8.6.21	ND	13.55	ND	20	10-20	6028.28	6014.73
	2.22.22	ND	13.71	ND				6014.57
	9.12.22	ND	13.48	ND				6014.80
	2.7.23	ND	13.71	ND				6014.57
	8.23.23	ND	13.34	ND				6014.94
EW-4	8.6.21	ND	12.14	ND	20	10-20	6026.83	6014.69
	2.22.22	ND	12.30	ND				6014.53
	9.12.22	ND	12.03	ND				6014.80
	2.7.23	ND	12.30	ND				6014.53
	8.23.23	ND	11.77	ND				6015.06

Monitoring wells surveyed in September 2021

[A] - Monitoring well EW-1 was not gauged due to ice covering the well head.

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: www.hallenvironmental.com

February 13, 2023

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

RE: Chaco Plant 3 Phase Separator OrderNo.: 2302356

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/8/2023 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 **2302356**
Date Reported: **2/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-4
Project: Chaco Plant 3 Phase Separator **Collection Date:** 2/7/2023 11:05:00 AM
Lab ID: 2302356-001 **Matrix:** AQUEOUS **Received Date:** 2/8/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Toluene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Ethylbenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Naphthalene	ND	2.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
2-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Acetone	ND	10		µg/L	1	2/9/2023 11:51:11 AM	R94517
Bromobenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Bromodichloromethane	5.7	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Bromoform	2.0	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Bromomethane	ND	3.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
2-Butanone	ND	10		µg/L	1	2/9/2023 11:51:11 AM	R94517
Carbon disulfide	ND	10		µg/L	1	2/9/2023 11:51:11 AM	R94517
Carbon Tetrachloride	2.4	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Chlorobenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Chloroethane	ND	2.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Chloroform	120	10		µg/L	10	2/10/2023 11:36:08 AM	R94558
Chloromethane	ND	3.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
2-Chlorotoluene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
4-Chlorotoluene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
cis-1,2-DCE	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Dibromochloromethane	2.4	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Dibromomethane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,1-Dichloroethane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,1-Dichloroethene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2-Dichloropropane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,3-Dichloropropane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
2,2-Dichloropropane	ND	2.0		µg/L	1	2/9/2023 11:51:11 AM	R94517

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

Qualifiers:

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

Analytical Report
Lab Order **2302356**
Date Reported: **2/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-4
Project: Chaco Plant 3 Phase Separator **Collection Date:** 2/7/2023 11:05:00 AM
Lab ID: 2302356-001 **Matrix:** AQUEOUS **Received Date:** 2/8/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Hexachlorobutadiene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
2-Hexanone	ND	10		µg/L	1	2/9/2023 11:51:11 AM	R94517
Isopropylbenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
4-Isopropyltoluene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
4-Methyl-2-pentanone	ND	10		µg/L	1	2/9/2023 11:51:11 AM	R94517
Methylene Chloride	ND	3.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
n-Butylbenzene	ND	3.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
n-Propylbenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
sec-Butylbenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Styrene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
tert-Butylbenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Tetrachloroethene (PCE)	2.6	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
trans-1,2-DCE	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Trichloroethene (TCE)	1.2	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Trichlorofluoromethane	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Vinyl chloride	ND	1.0		µg/L	1	2/9/2023 11:51:11 AM	R94517
Xylenes, Total	ND	1.5		µg/L	1	2/9/2023 11:51:11 AM	R94517
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	2/9/2023 11:51:11 AM	R94517
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	2/9/2023 11:51:11 AM	R94517
Surr: Dibromofluoromethane	107	70-130		%Rec	1	2/9/2023 11:51:11 AM	R94517
Surr: Toluene-d8	97.2	70-130		%Rec	1	2/9/2023 11:51:11 AM	R94517

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

Qualifiers:

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

Analytical Report
Lab Order **2302356**
Date Reported: **2/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-2
Project: Chaco Plant 3 Phase Separator **Collection Date:** 2/7/2023 11:50:00 AM
Lab ID: 2302356-002 **Matrix:** AQUEOUS **Received Date:** 2/8/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Toluene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Ethylbenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Naphthalene	ND	2.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
2-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Acetone	ND	10		µg/L	1	2/9/2023 1:12:28 PM	R94517
Bromobenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Bromodichloromethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Bromoform	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Bromomethane	ND	3.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
2-Butanone	ND	10		µg/L	1	2/9/2023 1:12:28 PM	R94517
Carbon disulfide	ND	10		µg/L	1	2/9/2023 1:12:28 PM	R94517
Carbon Tetrachloride	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Chlorobenzene	2.6	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Chloroethane	ND	2.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Chloroform	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Chloromethane	ND	3.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
2-Chlorotoluene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
4-Chlorotoluene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
cis-1,2-DCE	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Dibromochloromethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Dibromomethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,1-Dichloroethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,1-Dichloroethene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2-Dichloropropane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,3-Dichloropropane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
2,2-Dichloropropane	ND	2.0		µg/L	1	2/9/2023 1:12:28 PM	R94517

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

Qualifiers:

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

Analytical Report
Lab Order **2302356**
Date Reported: **2/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-2
Project: Chaco Plant 3 Phase Separator **Collection Date:** 2/7/2023 11:50:00 AM
Lab ID: 2302356-002 **Matrix:** AQUEOUS **Received Date:** 2/8/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Hexachlorobutadiene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
2-Hexanone	ND	10		µg/L	1	2/9/2023 1:12:28 PM	R94517
Isopropylbenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
4-Isopropyltoluene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
4-Methyl-2-pentanone	ND	10		µg/L	1	2/9/2023 1:12:28 PM	R94517
Methylene Chloride	ND	3.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
n-Butylbenzene	ND	3.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
n-Propylbenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
sec-Butylbenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Styrene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
tert-Butylbenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
trans-1,2-DCE	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Trichlorofluoromethane	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Vinyl chloride	ND	1.0		µg/L	1	2/9/2023 1:12:28 PM	R94517
Xylenes, Total	ND	1.5		µg/L	1	2/9/2023 1:12:28 PM	R94517
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	2/9/2023 1:12:28 PM	R94517
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/9/2023 1:12:28 PM	R94517
Surr: Dibromofluoromethane	107	70-130		%Rec	1	2/9/2023 1:12:28 PM	R94517
Surr: Toluene-d8	93.4	70-130		%Rec	1	2/9/2023 1:12:28 PM	R94517

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

Qualifiers:

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

Analytical Report
Lab Order **2302356**
Date Reported: **2/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-3
Project: Chaco Plant 3 Phase Separator **Collection Date:** 2/7/2023 12:30:00 PM
Lab ID: 2302356-003 **Matrix:** AQUEOUS **Received Date:** 2/8/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Toluene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Ethylbenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Naphthalene	ND	2.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
2-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Acetone	ND	10		µg/L	1	2/9/2023 1:39:36 PM	R94517
Bromobenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Bromodichloromethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Bromoform	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Bromomethane	ND	3.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
2-Butanone	ND	10		µg/L	1	2/9/2023 1:39:36 PM	R94517
Carbon disulfide	ND	10		µg/L	1	2/9/2023 1:39:36 PM	R94517
Carbon Tetrachloride	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Chlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Chloroethane	ND	2.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Chloroform	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Chloromethane	ND	3.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
2-Chlorotoluene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
4-Chlorotoluene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
cis-1,2-DCE	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Dibromochloromethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Dibromomethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,1-Dichloroethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,1-Dichloroethene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2-Dichloropropane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,3-Dichloropropane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
2,2-Dichloropropane	ND	2.0		µg/L	1	2/9/2023 1:39:36 PM	R94517

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

Qualifiers:

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

Analytical Report
Lab Order **2302356**
Date Reported: **2/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-3
Project: Chaco Plant 3 Phase Separator **Collection Date:** 2/7/2023 12:30:00 PM
Lab ID: 2302356-003 **Matrix:** AQUEOUS **Received Date:** 2/8/2023 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Hexachlorobutadiene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
2-Hexanone	ND	10		µg/L	1	2/9/2023 1:39:36 PM	R94517
Isopropylbenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
4-Isopropyltoluene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
4-Methyl-2-pentanone	ND	10		µg/L	1	2/9/2023 1:39:36 PM	R94517
Methylene Chloride	ND	3.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
n-Butylbenzene	ND	3.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
n-Propylbenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
sec-Butylbenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Styrene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
tert-Butylbenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
trans-1,2-DCE	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Trichlorofluoromethane	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Vinyl chloride	ND	1.0		µg/L	1	2/9/2023 1:39:36 PM	R94517
Xylenes, Total	ND	1.5		µg/L	1	2/9/2023 1:39:36 PM	R94517
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	2/9/2023 1:39:36 PM	R94517
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	2/9/2023 1:39:36 PM	R94517
Surr: Dibromofluoromethane	104	70-130		%Rec	1	2/9/2023 1:39:36 PM	R94517
Surr: Toluene-d8	95.9	70-130		%Rec	1	2/9/2023 1:39:36 PM	R94517

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#: **2302356**
13-Feb-23

Client: ENSOLUM
Project: Chaco Plant 3 Phase Separator

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R94517** RunNo: **94517**
Prep Date: Analysis Date: **2/9/2023** SeqNo: **3415898** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	24	1.0	20.00	0	118	70	130			
Chlorobenzene	23	1.0	20.00	0	117	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	110	70	130			
Trichloroethene (TCE)	23	1.0	20.00	0	114	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.4	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.8		10.00		98.1	70	130			

Sample ID: **2302356-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EW-4** Batch ID: **R94517** RunNo: **94517**
Prep Date: Analysis Date: **2/9/2023** SeqNo: **3415922** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0.7834	114	70	130			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	24	1.0	20.00	0.7776	115	70	130			
1,1-Dichloroethene	23	1.0	20.00	0.4574	111	70	130			
Trichloroethene (TCE)	24	1.0	20.00	1.229	116	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.5		10.00		95.3	70	130			

Sample ID: **2302356-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **EW-4** Batch ID: **R94517** RunNo: **94517**
Prep Date: Analysis Date: **2/9/2023** SeqNo: **3415924** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0.7834	114	70	130	0.181	20	
Toluene	22	1.0	20.00	0	111	70	130	4.43	20	
Chlorobenzene	23	1.0	20.00	0.7776	109	70	130	4.52	20	
1,1-Dichloroethene	21	1.0	20.00	0.4574	104	70	130	6.76	20	
Trichloroethene (TCE)	24	1.0	20.00	1.229	114	70	130	1.69	20	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		110	70	130	0	0	
Surr: Toluene-d8	9.2		10.00		91.7	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2302356**
13-Feb-23

Client: ENSOLUM
Project: Chaco Plant 3 Phase Separator

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**							
Client ID: **PBW**	Batch ID: **R94517**	RunNo: **94517**							
Prep Date:	Analysis Date: **2/9/2023**	SeqNo: **3415946**	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.	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#: **2302356**
13-Feb-23

Client: ENSOLUM
Project: Chaco Plant 3 Phase Separator

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R94517** RunNo: **94517**
Prep Date: Analysis Date: **2/9/2023** SeqNo: **3415946** 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	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R94558** RunNo: **94558**
Prep Date: Analysis Date: **2/10/2023** SeqNo: **3417844** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.8	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 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#: **2302356**

13-Feb-23

Client: ENSOLUM

Project: Chaco Plant 3 Phase Separator

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**						
Client ID: **LCSW**	Batch ID: **R94558**	RunNo: **94558**						
Prep Date:	Analysis Date: **2/10/2023**	SeqNo: **3417844**	Units: **%Rec**					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.4		10.00		93.9	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**						
Client ID: **PBW**	Batch ID: **R94558**	RunNo: **94558**						
Prep Date:	Analysis Date: **2/10/2023**	SeqNo: **3417860**	Units: **µg/L**					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroform	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.7	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.9	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

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.		

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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: 2302356 RcptNo: 1

Received By: Sean Livingston 2/8/2023 7:50:00 AM Sean Livingston

Completed By: Sean Livingston 2/8/2023 10:03:22 AM Sean Livingston

Reviewed By: TMC 2/8/23

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: JN 2/8/23

Special Handling (if applicable)

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

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

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good	Yes	YOGI		
2	0.2	Good	Yes	YOGI		

Received by OCD: 1/12/2024 7:38:03 AM

Released to Imaging: 4/5/2024 2:28:34 PM

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 6016 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: Chaco Plant 3Phase Separator

Project #: see notes

Project Manager: JCSummers

Sampler: RDeechilly

On Ice: ☑ Yes ☐ No YOGS

# of Coolers: 2 0.8-0.1=0.7²

Cooler Temp(including CF): 0.3-0.1=0.2 (°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. 2302356	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	8270 (Semi-VOA)	Total Coliform (Present/Absent)
2/7/23	1105	W	EW-4	(3)40mL VOA	$HgCl_2$	001								X		
2/7/23	1150	W	EW-2	(3)40mL VOA	$HgCl_2$	002								X		
2/7/23	1230	W	EW-3	(3)40mL VOA	$HgCl_2$	003								X		

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2/7/23	1647				2/7/23	1647
2/7/23	1820			courier	2/8/23	7:50

Remarks: PM-Tom Long (EPROD)
PayKey- SF1548
NonAFE- N48994

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

September 12, 2023

Kyle Summers

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

RE: Chaco Plant Phase Separator OrderNo.: 2308C90

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/24/2023 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 **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-4
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 9:27:00 AM
Lab ID: 2308C90-001 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Toluene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Ethylbenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Naphthalene	ND	2.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
2-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Acetone	ND	10		µg/L	1	8/31/2023 7:14:47 PM	R99398
Bromobenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Bromodichloromethane	5.1	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Bromoform	1.9	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Bromomethane	ND	3.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
2-Butanone	ND	10		µg/L	1	8/31/2023 7:14:47 PM	R99398
Carbon disulfide	ND	10		µg/L	1	8/31/2023 7:14:47 PM	R99398
Carbon Tetrachloride	3.1	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Chlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Chloroethane	ND	2.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Chloroform	150	10		µg/L	10	9/1/2023 9:42:26 AM	R99433
Chloromethane	ND	3.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
2-Chlorotoluene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
4-Chlorotoluene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
cis-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Dibromochloromethane	2.2	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Dibromomethane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,1-Dichloroethane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,1-Dichloroethene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,3-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
2,2-Dichloropropane	ND	2.0		µg/L	1	8/31/2023 7:14:47 PM	R99398

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

Qualifiers:

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

Analytical Report
Lab Order **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-4
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 9:27:00 AM
Lab ID: 2308C90-001 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Hexachlorobutadiene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
2-Hexanone	ND	10		µg/L	1	8/31/2023 7:14:47 PM	R99398
Isopropylbenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
4-Isopropyltoluene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
4-Methyl-2-pentanone	ND	10		µg/L	1	8/31/2023 7:14:47 PM	R99398
Methylene Chloride	ND	3.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
n-Butylbenzene	ND	3.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
n-Propylbenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
sec-Butylbenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Styrene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
tert-Butylbenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Tetrachloroethene (PCE)	3.3	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
trans-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Trichloroethene (TCE)	1.3	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Trichlorofluoromethane	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Vinyl chloride	ND	1.0		µg/L	1	8/31/2023 7:14:47 PM	R99398
Xylenes, Total	ND	1.5		µg/L	1	8/31/2023 7:14:47 PM	R99398
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	8/31/2023 7:14:47 PM	R99398
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/31/2023 7:14:47 PM	R99398
Surr: Dibromofluoromethane	95.4	70-130		%Rec	1	8/31/2023 7:14:47 PM	R99398
Surr: Toluene-d8	96.9	70-130		%Rec	1	8/31/2023 7:14:47 PM	R99398

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

Qualifiers:

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

Analytical Report
Lab Order **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-2
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 10:10:00 AM
Lab ID: 2308C90-002 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Toluene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Ethylbenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Naphthalene	ND	2.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
2-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Acetone	ND	10		µg/L	1	8/31/2023 7:43:22 PM	R99398
Bromobenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Bromodichloromethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Bromoform	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Bromomethane	ND	3.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
2-Butanone	ND	10		µg/L	1	8/31/2023 7:43:22 PM	R99398
Carbon disulfide	ND	10		µg/L	1	8/31/2023 7:43:22 PM	R99398
Carbon Tetrachloride	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Chlorobenzene	4.4	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Chloroethane	ND	2.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Chloroform	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Chloromethane	ND	3.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
2-Chlorotoluene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
4-Chlorotoluene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
cis-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Dibromochloromethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Dibromomethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,1-Dichloroethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,1-Dichloroethene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,3-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
2,2-Dichloropropane	ND	2.0		µg/L	1	8/31/2023 7:43:22 PM	R99398

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

Qualifiers:

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

Analytical Report
Lab Order **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-2
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 10:10:00 AM
Lab ID: 2308C90-002 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Hexachlorobutadiene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
2-Hexanone	ND	10		µg/L	1	8/31/2023 7:43:22 PM	R99398
Isopropylbenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
4-Isopropyltoluene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
4-Methyl-2-pentanone	ND	10		µg/L	1	8/31/2023 7:43:22 PM	R99398
Methylene Chloride	ND	3.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
n-Butylbenzene	ND	3.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
n-Propylbenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
sec-Butylbenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Styrene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
tert-Butylbenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
trans-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Trichlorofluoromethane	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Vinyl chloride	ND	1.0		µg/L	1	8/31/2023 7:43:22 PM	R99398
Xylenes, Total	ND	1.5		µg/L	1	8/31/2023 7:43:22 PM	R99398
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	8/31/2023 7:43:22 PM	R99398
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/31/2023 7:43:22 PM	R99398
Surr: Dibromofluoromethane	96.6	70-130		%Rec	1	8/31/2023 7:43:22 PM	R99398
Surr: Toluene-d8	96.9	70-130		%Rec	1	8/31/2023 7:43:22 PM	R99398

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

Qualifiers:

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

Analytical Report
Lab Order **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-3
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 10:55:00 AM
Lab ID: 2308C90-003 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Toluene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Ethylbenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Naphthalene	ND	2.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
2-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Acetone	ND	10		µg/L	1	8/31/2023 8:11:56 PM	R99398
Bromobenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Bromodichloromethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Bromoform	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Bromomethane	ND	3.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
2-Butanone	ND	10		µg/L	1	8/31/2023 8:11:56 PM	R99398
Carbon disulfide	ND	10		µg/L	1	8/31/2023 8:11:56 PM	R99398
Carbon Tetrachloride	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Chlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Chloroethane	ND	2.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Chloroform	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Chloromethane	ND	3.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
2-Chlorotoluene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
4-Chlorotoluene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
cis-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Dibromochloromethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Dibromomethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,1-Dichloroethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,1-Dichloroethene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,3-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
2,2-Dichloropropane	ND	2.0		µg/L	1	8/31/2023 8:11:56 PM	R99398

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

Qualifiers:

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

Analytical Report
Lab Order **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-3
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 10:55:00 AM
Lab ID: 2308C90-003 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Hexachlorobutadiene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
2-Hexanone	ND	10		µg/L	1	8/31/2023 8:11:56 PM	R99398
Isopropylbenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
4-Isopropyltoluene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
4-Methyl-2-pentanone	ND	10		µg/L	1	8/31/2023 8:11:56 PM	R99398
Methylene Chloride	ND	3.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
n-Butylbenzene	ND	3.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
n-Propylbenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
sec-Butylbenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Styrene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
tert-Butylbenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
trans-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Trichlorofluoromethane	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Vinyl chloride	ND	1.0		µg/L	1	8/31/2023 8:11:56 PM	R99398
Xylenes, Total	ND	1.5		µg/L	1	8/31/2023 8:11:56 PM	R99398
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	8/31/2023 8:11:56 PM	R99398
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	8/31/2023 8:11:56 PM	R99398
Surr: Dibromofluoromethane	93.8	70-130		%Rec	1	8/31/2023 8:11:56 PM	R99398
Surr: Toluene-d8	96.5	70-130		%Rec	1	8/31/2023 8:11:56 PM	R99398

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

Qualifiers:

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

Analytical Report
Lab Order **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-1
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 11:40:00 AM
Lab ID: 2308C90-004 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	22	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Toluene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Ethylbenzene	23	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Naphthalene	ND	2.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
2-Methylnaphthalene	ND	4.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Acetone	ND	10		µg/L	1	8/31/2023 8:40:25 PM	R99398
Bromobenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Bromodichloromethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Bromoform	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Bromomethane	ND	3.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
2-Butanone	ND	10		µg/L	1	8/31/2023 8:40:25 PM	R99398
Carbon disulfide	ND	10		µg/L	1	8/31/2023 8:40:25 PM	R99398
Carbon Tetrachloride	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Chlorobenzene	5.6	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Chloroethane	ND	2.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Chloroform	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Chloromethane	ND	3.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
2-Chlorotoluene	4.3	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
4-Chlorotoluene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
cis-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Dibromochloromethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Dibromomethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,1-Dichloroethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,1-Dichloroethene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,3-Dichloropropane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
2,2-Dichloropropane	ND	2.0		µg/L	1	8/31/2023 8:40:25 PM	R99398

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

Qualifiers:

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

Analytical Report
Lab Order **2308C90**
Date Reported: **9/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** EW-1
Project: Chaco Plant Phase Separator **Collection Date:** 8/23/2023 11:40:00 AM
Lab ID: 2308C90-004 **Matrix:** AQUEOUS **Received Date:** 8/24/2023 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Hexachlorobutadiene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
2-Hexanone	ND	10		µg/L	1	8/31/2023 8:40:25 PM	R99398
Isopropylbenzene	8.5	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
4-Isopropyltoluene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
4-Methyl-2-pentanone	ND	10		µg/L	1	8/31/2023 8:40:25 PM	R99398
Methylene Chloride	ND	3.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
n-Butylbenzene	ND	3.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
n-Propylbenzene	2.7	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
sec-Butylbenzene	3.0	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Styrene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
tert-Butylbenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
trans-1,2-DCE	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Trichlorofluoromethane	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Vinyl chloride	ND	1.0		µg/L	1	8/31/2023 8:40:25 PM	R99398
Xylenes, Total	ND	1.5		µg/L	1	8/31/2023 8:40:25 PM	R99398
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	8/31/2023 8:40:25 PM	R99398
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/31/2023 8:40:25 PM	R99398
Surr: Dibromofluoromethane	92.8	70-130		%Rec	1	8/31/2023 8:40:25 PM	R99398
Surr: Toluene-d8	94.5	70-130		%Rec	1	8/31/2023 8:40:25 PM	R99398

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#: **2308C90**

12-Sep-23

Client: ENSOLUM

Project: Chaco Plant Phase Separator

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R99398**	RunNo: **99398**
Prep Date:	Analysis Date: **8/31/2023**	SeqNo: **3627133** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.8	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	97.6	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.2	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.5	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R99398**	RunNo: **99398**
Prep Date:	Analysis Date: **8/31/2023**	SeqNo: **3627171** 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:

*	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#: **2308C90**

12-Sep-23

Client: ENSOLUM

Project: Chaco Plant Phase Separator

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R99398**	RunNo: **99398**
Prep Date:	Analysis Date: **8/31/2023**	SeqNo: **3627171** 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:

*	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#: **2308C90**

12-Sep-23

Client: ENSOLUM

Project: Chaco Plant Phase Separator

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R99398**	RunNo: **99398**
Prep Date:	Analysis Date: **8/31/2023**	SeqNo: **3627171** 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	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.2	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R99433**	RunNo: **99433**
Prep Date:	Analysis Date: **9/1/2023**	SeqNo: **3629024** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroform	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.4	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R99433**	RunNo: **99433**
Prep Date:	Analysis Date: **9/1/2023**	SeqNo: **3629025** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.1	70	130			
Surr: Toluene-d8	9.8		10.00		97.6	70	130			

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: 2308C90 RcptNo: 1

Received By: Tracy Casarrubias 8/24/2023 6:30:00 AM

Completed By: Tracy Casarrubias 8/24/2023 7:05:01 AM

Reviewed By: JN 8/24/23

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 ☑	# of preserved bottles checked for pH:	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	(<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: SCM 8/24/23	

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 8/24/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good	Yes	Yogi		

Received by OCD: 1/12/2024 7:38:03 AM

Released to Imaging: 4/5/2024 2:28:34 PM

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: Chaco Plant 3 Phase Separator

Project #: See notes

Project Manager: KSummers

Sampler: RDeechilly

On Ice: ☑ Yes ☐ No yogi

# of Coolers: 1

Cooler Temp (including CF): 3.9 - 0 = 3.9 (°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. 2308C90	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	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/23/23	927	W	EW-4	(3) 40mL VOA	$HgCl_2$	001								X		
8/23/23	1010	W	EW-2	(3) 40mL VOA	$HgCl_2$	002								X		
8/23/23	1055	W	EW-3	(3) 40mL VOA	$HgCl_2$	003								X		
8/23/23	1140	W	EW-1	(3) 40mL VOA	$HgCl_2$	004								X		

Date	Time	Relinquished by	Received by	Via	Date	Time
8/23/23	1556	[signature]	[signature]		8/23/23	1556
8/23/23	1811	[signature]	[signature]	courier	8/24/23	6:30

Remarks: PM-Tom Long (EPROD)
Paykey - SF11548
Non AFE - N48994

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.

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

Operator:	OGRID:
Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	241602
	Action Number: 302995
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	2023 Groundwater Monitoring Report for Chaco Plant 3 Phase Separator: Content Satisfactory 1. Continue to conduct semi-annual groundwater sampling for analysis. 2. Submit the 2024 Groundwater Monitoring Report by April 1, 2025. 3. Establish if monitored natural attenuation is a viable options for abatement and propose recommendation to NMOCD. 4. If a stage 2 abatement plan is in place, a modification to the abatement plan to incorporate a change in remediation/abatement of groundwater contaminants will need to be implemented and approved by OCD.	4/5/2024